Final West Chocolate Mountains Renewable Energy Evaluation Area Environmental Impact Statement Public Scoping Report

April 2011

United States Bureau of Land Management



Prepared for:

Bureau of Land Management California Desert District Office 22835 Calle San Juan De Los Lagos Moreno Valley, CA 92553

Prepared by:

Ecology and Environment, Inc. 401 West A Street, Suite 775 San Diego, CA 92101

Table of Contents

Sectio	<u>n</u>		<u>Page</u>
1.0	INTRO	DDUCTION	1
	1.1	Purpose and Need	1
	1.2	Description of the CDCA Plan	3
	1.3	Description of the Proposed Action	3
	1.4	NEPA Scoping Requirements	6
2.0	SCOP	ING PROCESS FOR THIS PROJECT	6
3.0	COMN	MENT SUMMARY	8
	3.1	Overview of Comment Use in EIS Process	8
	3.2	Organization of Comments	9
	3.3	Entities that Provided Comments	10
	3.4	Issues Identified During Scoping	11
	3.5	Decisions Based on the EIS	16
	3.6	Issues Raised that Will Not Be Addressed in the EIS	16
4.0	SUMN	MARY OF FUTURE STEPS IN THE PLANNING PROCESS	53
5.0	DEEE	RENCES	55

List of Tables

Table 1	Land Ownership	4
Table 2	Summary of all Comments Received (by topic)	
List of F	iguros	
LIST OF F	<u>rigures</u>	
Figure 1	Map of the Project Area	5
Figure 2	Planning Process Flow Chart and Timeline	53

List of Appendices

- A Notice of Intent Published in Federal Register on February 10, 2010
- **B** Scoping Meeting Flyer and Mailing List
 - B.1 Notice on the CDDO Website
 - B.2 Notice on El Centro Field Office Website
 - B.3 Mailing List
- C Scoping Meeting Materials
 - C.1 Meeting Registration
 - C.2 Meeting Agenda
 - C.3 Meeting Comment Forms
 - C.4 Project Fact Sheet
 - C.5 Project Area Map
 - C.6 Project Photos/Poster Boards
- D Scoping Meeting Presentation
- E Transcript from Scoping Meeting March 4, 2010, Imperial County, California
- F Comments Received During the Scoping Period

Abbreviations and Acronyms Used in this Report

BLM Bureau of Land Management

CDCA California Desert Conservation Area

CDDO California Desert District Office

CEQ Council on Environmental Quality

CFR Code of Federal Regulations

DEIS Draft Environmental Impact Statement

EEMP Equipment Emission Mitigation Plan

EIS Environmental Impact Statement [NEPA]

FLPMA Federal Land Policy and Management Act

FUDS Formerly Used Defense Sites

GHG Greenhouse Gas

kV kilovolt MW megawatt

NAAQS National Ambient Air Quality Standards

NEPA National Environmental Policy Act
NGO Nongovernmental Organization

NHPA National Historic Preservation Act

NOI Notice of Intent

OHV Off-Highway Vehicle

PV Photovoltaic ROW Right-of-Way

TMDL Total Maximum Daily Load

WOUSs Waters of the United States

1.0 INTRODUCTION

In compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, the U.S. Department of the Interior Bureau of Land Management (BLM) California Desert District Office (CDDO), in conjunction with the BLM El Centro Field Office, is preparing an Environmental Impact Statement (EIS) and an amendment to the California Desert Conservation Area (CDCA) Plan.

The BLM will prepare the EIS to evaluate the potential environmental impacts of (1) leasing approximately 17,900 acres of BLM-managed surface lands for testing and developing solar and wind energy facilities and (2) leasing approximately 20,962 acres of federal mineral estate for geothermal energy testing and development. In addition, the CDCA Plan would be amended to allow wind and solar (renewable energy) development. The proposed action is to consider a landscape level Reasonably Forseeable Development (RFD) scenario for geothermal leases, and wind and solar right-of-way grants, within the West Chocolate Mountains Renewable Energy Evaluation Area (WCM REEA) near Niland, California. Project-specific renewable energy development proposals would require subsequent NEPA documentation.

Scoping is an early phase of the NEPA review process and is used to focus the environmental analysis and incorporate issues and alternatives identified by the BLM, other agencies, organizations, and the public. This report summarizes the activities conducted during scoping (Section 2), summarizes the comments received during the scoping period (Section 3), and indicates how the BLM will address comments in the EIS (Section 4).

The BLM has completed the scoping phase of the proposed action and will use the comments received during the scoping period to help:

- Identify key issues to focus the EIS analysis;
- Identify reasonable alternatives for analysis;
- Identify environmental impacts of the project and alternatives:
- Identify ways to avoid or reduce environmental impacts; and
- Inform the agency decision-making process.

1.1 Purpose and Need

The purpose of the proposed action is to identify the existing resources associated with the land in the West Chocolate Area, analyze the environmental impacts of potential renewable energy development, and develop measures to mitigate the impacts related to geothermal, solar, and wind energy testing and development.

By addressing potential impacts to the environment, the following key decisions on future siting of individual geothermal, solar, and wind energy projects will be made:

- Approve or deny pending geothermal lease application CACA 047196;
- Determine which lands to make available for geothermal leasing;
- Determine which lands to make available for solar energy rights-of-way (ROWs); and
- Determine which lands to make available for wind energy ROWs.

The need for the proposed federal action arises from pending renewable energy applications, national policy, and Congressional direction. There is one pending application (CACA 047196) for noncompetitive lease of geothermal resources in the West Chocolate Area. There are no ROW grant applications for solar or wind energy projects. The National Energy Policy, released in May 2001, directed "the Secretary of the Interior to determine ways to reduce the delays in geothermal lease processing as part of the permitting review process." On May 18, 2001, former President Bush issued Executive Order 13212, Actions to Expedite Energy-Related Projects, which states that "the increased production and transmission of energy in a safe and environmentally sound manner is essential." Executive departments and agencies are directed to "take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy." Executive Order 13212 further states that "for energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections. The agencies shall take such actions to the extent permitted by law and regulation, and where appropriate." Additionally, the Energy Policy Act of 2005 (Pub. L 109-58) made significant changes to the Geothermal Steam Act of 1970, as amended, to encourage leasing and development of geothermal resources on public lands. In addition, the 2005 act changed the renewable energy production incentive and established federal purchase requirements for increases in renewable energy, including wind and solar energy, over the following timeframe:

- Not less than 3 percent of energy purchased from renewable sources in fiscal years 2007 through 2009,
- 2. Not less than 5 percent of energy purchased from renewable sources in fiscal years 2010 through 2012, and
- 3. Not less than 7.5 percent of energy purchased from renewable sources in fiscal year 2013 and each fiscal year thereafter.

Although the proposed project is a federal action that would apply to federal land, it would also meet one of the California Renewables Portfolio Standard (RPS) Program goals, which calls for 20 percent of California's energy to be produced from renewable sources by 2010.

1.2 Description of the CDCA Plan

The CDCA Plan encompasses 25 million acres of land in Southern California designated by Congress in 1976 through the FLPMA. The plan was developed in response to Congress's direction to the BLM to prepare and implement a comprehensive, long-range plan to manage, use, develop, and protect public lands within the CDCA. The CDCA Plan is based on the concepts of multiple use, sustained yield, and maintenance of environmental quality (BLM 1980). The CDCA Plan provides overall regional guidance for management of the public lands in the CDCA and establishes long-term goals for protection and use of the California desert.

The CDCA Plan establishes four multiple use classes, multiple use class guidelines, and plan elements for specific resources or activities such as motorized-vehicle access, recreation, and vegetation. The multiple use classes are defined as follows:

- Class C (Controlled Use)
- Class L (Limited Use)
- Class M (Moderate Use)
- Class I (Intensive Use)

The CDCA Plan established a network of 16 utility planning corridors across the Mojave and Colorado deserts. Each corridor is 2 to 5 miles wide. The intent of the corridors is to provide a delivery system network that meets public needs in a manner that minimizes the proliferation of widely separated ROWs by encouraging the joint use of corridors for utilities. To accommodate those instances when a utility might need to be located outside of a "planned" utility corridor, several "contingent" corridors were identified by the CDCA Plan that could be activated through an amendment.

The CDCA Plan also included a Motorized Vehicle Access Element that designates all public land in the California desert as "open" (roads are not required for vehicle use), "closed" (no vehicles allowed), or "limited" (vehicles must stay on roads), based on BLM's multiple use classes (BLM 1980). In "open areas," travel is permitted anywhere within the area if the vehicle is operated responsibly in accordance with regulations (BLM 1980).

1.3 Description of the Proposed Action

To help evaluate the potential impacts of the proposed leases, the BLM has developed Reasonably Foreseeable Development (RFD) Scenarios that outline the type of renewable energy development that could occur within the WCM REEA. The Geothermal RFD Scenario proposes development of up to three 50-megawatt (MW) geothermal power plants. The Solar RFD Scenario proposes development of up to four 50-MW solar photovoltaic power plants. The Wind RFD Scenario proposes development of one 45-MW wind project.

As mentioned above, the BLM will prepare an EIS to evaluate the potential environmental impacts of renewable energy projects on lands managed by the BLM EI Centro Field Office in the West Chocolate Area near Niland, California, and will also prepare a CDCA Plan Amendment to allow for rights of way grants for wind and solar development.

The West Chocolate Area is within the boundaries of the CDCA. The area is south of Riverside County, north of the City of Calipatria, east of the Salton Sea, and west of the Chocolate Mountains in central Imperial County, California (Figure 1).

The West Chocolate Area (BLM and non-BLM land) consists of approximately 59,095 acres (Table 1). There are 31,551 acres of private lands, 3,200 acres of land managed by the California State Lands Commission (CSLC), 1,782 acres of split estate land (private surface/federal minerals), 2,862 acres of acquired lands, and 1,800 acres of land (federal surface/federal minerals) withdrawn by the Bureau of Reclamation (BOR). On split estate land, the surface rights are owned by a private entity, but the mineral (or subsurface) rights are retained by the federal government and can be leased and developed. Subsurface rights can be limited to just oil and gas or just particular minerals, or they can include all potential resources. The land managed by the Wildlands Conservancy and the lands withdrawn by the BOR are currently not open to energy development of any type.

Table 1 Land Ownership

Land Owner	Type of Land Use	Acres
BLM		
El Centro Field Office in Imperial County, CA	Federal surface/federal minerals	17,900
BOR	Federal surface/federal minerals	1,800
	Geothermal leasing and development	
	is allowed; solar and wind	
CSLC	development is excluded	3,200
Private land (Imperial County jurisdiction)	Surface ownership	31,551
Acquired Lands	Surface ownership	2,862
Split Estate ¹	Private surface/federal minerals	1,782 ²
Total		59,095

Source: BLM March 31, 2010

Notes:

¹Split Estate lands are defined as lands for which the surface land owner does not own the underlying mineral estate. In the West Chocolate Area, 1,782 surface acres are privately owned and the same underlying mineral estate acreage is owned by the BLM. ²Of the 1,782 acres of split estate, 1,182 acres are all minerals, 520 are oil and gas only, and 80 are geothermal only.

Key:

BLM = Bureau of Land Management BOR = Bureau of Reclamation

CSLC = California State Lands Commission

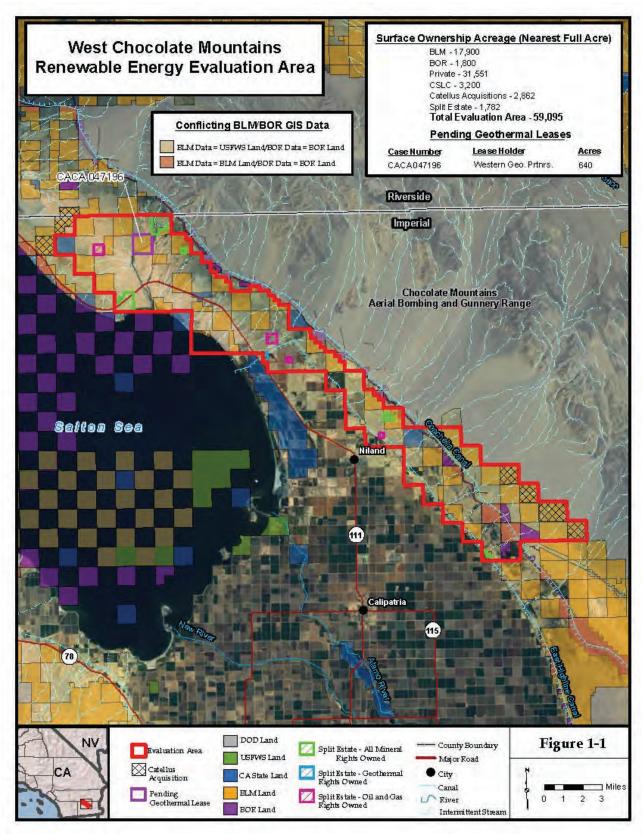


Figure 1 Map of the Project Area

1.4 NEPA Scoping Requirements

Scoping is the coordination and consultation process required under NEPA regulations to ensure that all interested parties have opportunity to provide input on the issues to be analyzed in the environmental documents, in this case an EIS and CDCA Plan Amendment. This process ensures that significant public issues, reasonable alternatives, and all relevant impacts are addressed in environmental documents, and determines the scope and degree to which these issues and impacts will be analyzed. Scoping is required by the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] 1501.7).

Public involvement early in the scoping process is the first step in providing a solid foundation for all project activities. Scoping meetings are one way for lead agencies to provide an opportunity for public involvement. The following interested parties are invited to participate in scoping meetings:

- Federal agencies
- State agencies
- County agencies
- City agencies
- Affected tribes
- Affected communities
- Businesses
- Interested non-governmental organizations
- Interested individuals

Although the scoping period is 30 days, interested parties can comment on the environmental document at other times, as well. For the West Chocolate Area proposed action, a process similar to scoping will begin as soon as the draft environmental document is released. In addition to having an opportunity to provide comments on the Draft EIS (DEIS) analysis at that time, the public will be able to comment on whether their scoping comments have been addressed adequately in the environmental document.

2.0 SCOPING PROCESS FOR THIS PROJECT

The initial 30-day scoping period for the project was from February 10, 2010 to March 12, 2010. On February 10, 2010, the BLM extended the scoping period to March 19, 2010, to provide an opportunity for all interested parties to participate in the process. The scoping period commenced with publication of the Notice of Intent (NOI) in the Federal Register (Appendix A). The NOI announced a period for public scoping of alternatives, issues, impacts, and planning criteria. The NOI also requested the views of other agencies on the scope and content of the environmental information that was germane to the statutory responsibilities or areas of expertise for those agencies. Federal, state, and local agencies as well as individuals and organizations that were interested or might be affected by the BLM's decision on this

project were invited to participate in the scoping process and could request or be requested by the BLM to participate as a cooperating agency.

In accordance with 40 CFR 1501.7, which requires that scoping must be conducted both with appropriate BLM staff and with tribes, the following tribes were given notice of the project as the first step in the consultation process:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Indians
- Cabazon Band of Mission Indians
- Campo Kumeyaay Nation
- Cocopah Indian Tribe
- Colorado River Indian Tribes
- Fort Yuma Quechan Tribe
- Ewijaapaayp Band of Kumeyaay Indians
- La Posta Band of Kumeyaay Indians
- Los Coyotes Band of Cahuillan and Cupeno Indians
- Manzanita Band of Kumeyaay Indians
- Santa Rosa Band of Cahuilla Indians
- Santa Ysabel Band of Diegueno Indians
- Torres-Martinez Desert Cahuilla Indians
- Twenty-nine Palms Band of Mission Indians
- Chemehuevi Reservation
- Kwaaymii Laguna Band of Indians

The BLM held one public scoping meeting near the project location, at the Calipatria Inn and Suites (700 North Sorensen Avenue, Calipatria, California), from 6:30 to 8:30 p.m. on March 4, 2010. The BLM had notified the public about the date, time, and location of the scoping meeting by posting a flyer at the Calipatria Inn and Suites, posting the public meeting notice in the Federal Register on February 10, 2010, and on the BLM "newsbytes" page (http://www.blm.gov/ca/news/newsbytes/index.html), and sending notices to agencies, interested parties, and Tribal Nations (Appendix B). The meeting had 19 attendees.

The scoping meeting began with a presentation by the BLM describing its role as lead agency to administer the NEPA process and properly evaluate the proposed action. BLM representatives described opportunities for public involvement and provided an overview of the environmental issues already identified for inclusion in the EIS. Following the presentation, an open house was held to allow participants to review displays, maps, and literature, as well as to meet members of the BLM EIS team.

A court reporter recorded the scoping meeting presentation and each of the verbal comments made by the public. Participants could provide verbal comments, place written comments in a box provided for that purpose, or take a comment form to complete and mail in later. All meeting materials also contained a project-specific email address to use to send electronic comments. The comment form, as well as all other materials available to the public during the meeting, accompanies this report in Appendix C. Meeting attendees were encouraged to take additional comment forms with them. The presentation on the proposed project/proposed action is attached (Appendix D).

Three people provided verbal comments at the scoping meeting and one comment form was submitted during the meeting; in addition, the BLM received eight electronic comment letters and/or emails from private citizens, government agencies, non-governmental organizations (NGOs), and business associations during the scoping period.

The BLM also used the NEPA commenting process to satisfy the public involvement process for Section 106 of the National Historic Preservation Act (NHPA; 16 U.S. Code 470(f) as provided for in 36 CFR 800.2(d)(3)).

3.0 COMMENT SUMMARY

This section provides (1) an overview explaining how comments are used in the EIS process in relation to regulatory requirements, (2) an explanation of how the comments were organized, (3) a summary of entities providing comments, (4) a summary of issues identified during scoping.

Comments received during the scoping period are presented in Table 2, located at the end of this section. In the table, only one representative comment is provided if multiple comments identified the same issue, and minor changes were made to correct mechanical errors such as misspelled words. Otherwise, comments in the table are verbatim; therefore, they reflect the views of the commenters and may contain factual errors. Transcripts from the public scoping meeting are provided in Appendix E of this report, and full copies of exact comments received during the scoping period are given in Appendix F.

3.1 Overview of Comment Use in EIS Process

The description of the proposed action and alternatives will be the basis for defining the scope of the EIS and assessing impacts. When refining the description of the proposed action, the BLM will consider comments for both the proposed action and alternatives.

The CEQ regulations implementing NEPA require an analysis of available alternative actions prior to selecting the preferred alternative action. Input on alternatives will be considered in the analysis and text of the EIS. Chapter 2 of the Draft EIS/Plan Amendment will describe which alternatives were considered but were not carried forward for detailed analysis in the EIS.

The CEQ regulations require an analysis of the impacts of a project on the "human environment." These impacts include effects on natural, human, and cultural resources. Discussions with affected agencies and members of the public, such as those that have occurred through this scoping effort, help define and evaluate effects of the alternatives on the human environment. In developing the scope of EIS technical studies, BLM will consider comments on environmental impacts. Chapter 3, Affected Environment, and Chapter 4, Environmental Consequences, of the EIS will address the issues incorporated into the study. Concerns about the EIS studies and decision-making processes will be considered in refining and modifying the EIS process throughout the remainder of the EIS preparation.

Some comments may be considered outside the scope of this EIS if (1) the issue relates to facilities not included in this project, (2) the issue is not within the jurisdiction of BLM to resolve, or (3) the issue cannot be reasonably addressed within the scope of this process or is being addressed through a separate NEPA process. In addition, personal opinions of individuals or special interest groups about the project, wind and solar power, the BLM, and other topics are outside the scope of the EIS and will not be addressed.

3.2 Organization of Comments

Oral comments from the scoping meeting, as well as written comments received via comment forms, emails, and letters received through March 19, 2010, were reviewed, documented, and entered into a database to facilitate organization, sorting, and analysis. The database was structured to organize comments into separate issue categories, with type of comment indicated (e.g., letter, email, or oral comment from scoping meeting). Using the experience and professional judgment of the EIS team, the comments were organized into 21 major issue categories as they relate to the EIS. The major issue categories are listed under overarching groups below and are described in detail in Section 3.4.

Project-Related. This group of includes comments about various aspects and components of the project as well as suggestions for project alternatives that should be considered in the EIS. Identified issue categories are:

- 1. Project Alternatives
- 2. Project Description
- 3. Project Purpose and Need

Resources. This group includes comments about the project's potential impacts on natural resources, human resources, and cultural resources as well as comments about social and economic concerns. The issue categories identified are the following:

- 1. Aesthetics/Visual
- Air Quality
- 3. Biological

- 4. Climate Change
- 5. Cultural
- 6. Cumulative Impacts
- 7. Energy/Minerals
- 8. Environmental Justice
- 9. Growth Inducement
- 10. Hazards and Public Health and Safety
- 11. Hydrology, Water Quality, and Water
- 12. Lands and Realty
- 13. Noise
- 14. Recreation
- 15. Social and Economic Considerations
- 16. Soils/Geology
- 17. Transportation
- 18. Waste

3.3 Entities that Provided Comments

The following governmental agencies provided comments:

- U.S. Environmental Protection Agency (EPA)
- U.S. Marine Corps MCI-West
- Department of the Navy (DoN)

The following non-government organization (NGOs) provided comments:

- Center for Biological Diversity
- Defenders of Wildlife
- Desert Protective Council (DPC)
- Wildlife Research Institute
- The Wildlands Conservancy

The following Tribal Nation provided comments:

Quechan Tribe

In addition, four individuals provided comments during the public scoping meeting (three provided verbal comments, and one submitted a written comment).

3.4 Issues Identified During Scoping

This section provides a summary of issues identified during scoping, organized by issue category. Some statements summarize multiple comments, while others summarize only one comment. The method used to categorize issues is indicated in Sections 3.2 and 3.3. Some comments indicate misunderstanding of the current action, which is consideration of allowing energy development leases in the WCM REEA. Since this proposed action does not involve actual development of energy facilities, specific impacts of specific projects cannot be determined or analyzed but will be addressed in the EIS for this action at a general landscape level. Comments summarized below may reflect inaccurate use of terms such as "project" or "project area" for this particular action.

Project Alternatives

Four comments were received regarding project alternatives. These included recommendations that the EIS (1) describe how each alternative was developed, how each alternative addresses each project objective, and how each alternative will be implemented; (2) describe the rationale used to determine whether impacts of an alternative are significant; (3) provide a discussion of alternative sites, capacities, and generating technologies relevant to the development of geothermal, solar, and wind resources; (4) describe the benefits and disadvantages associated with each of the proposed technologies; and (5) establish a wide range of alternatives, including consideration of an environmentally preferred alternative.

Project Description

Three comments were received regarding the project description. These included recommendations that the EIS (1) identify the premium geothermal, solar, and wind resource areas in the West Chocolate Mountains Renewable Energy Evaluation Area (WCM REEA); (2) describe and summarize the key studies and information used to identify these areas; (3) describe the actions that BLM will take if the RFD scenario underestimates the geothermal capacity within a specific area; and (4) describe the reasonably foreseeable future land use and associated impacts that will result from the additional power supply including an estimate of the amount of growth, the likely location, and the biological and environmental resources at risk.

Purpose and Need

Three comments were received regarding the purpose of and need for the project. These comments included suggestions that the DEIS discuss the proposed project in the context of the larger energy market this project would serve, identify potential purchasers of the power produced, and discuss how the project would help the state meet its renewable portfolio standards and goals.

Aesthetics/Visual Resources

One comment was received regarding the loss of unspoiled scenic vistas in the desert due to development of large-scale renewable energy projects.

Air Quality

Several comments were received pertaining to air quality and emissions, reduction of criteria air pollutants and hazardous air pollutants (air toxics), existing air quality conditions and regulations, quantification of emissions, specification of emission sources, an equipment emissions mitigation plan (EEMP), a fugitive dust control plan, general conformity to an approved implementation plan, cumulative impacts to air quality, the new source review (NSR) construction permit program, and the NSR program permit process. The DPC provided comments related to dust generation and air quality impacts from a variety of natural and human activities.

Biological Resources

Several comments regarding biological resources were received. The Wildlife Research Institute provided comments related to golden eagles and new permit regulations for golden eagles. The EPA provided comments related to biological resources and habitat; construction, operation, and maintenance impacts on habitat; protection of high value habitat and creation or preservation of linkages; species/habitat impacts due to shade from solar collectors, habitat loss and fragmentation, fences around the project site(s), and shade impacts to avian species; regulations; and invasive species management. The Center for Biological Diversity provided comments related to invasive/exotic species, sensitive/rare species habitat, the need for biological surveys, habitat impacts and mitigation, desert tortoises, flat-tailed horned lizards, burrowing owls, and wildlife movement. The DPC provided comments related to comprehensive review of habitat/corridors and flat-tailed horned lizards. Defenders of Wildlife provided comments related to Salton Sea riparian habitat restoration, the Wister Unit of the Imperial Wildlife Area, appropriate use of lands acquired for conservation, and compatibility of wind energy with bat and avian species. Comments regarding special status species included requests to configure the boundary of the West Chocolate Area around habitat for desert tortoise, flat-tailed horned lizard, and burrowing owl.

Climate Change

Comments were received regarding climate change effects on desert ecosystems. Commenters recommended that the EIS discuss (1) whether the trenching, grading, and filling associated with the construction of renewable energy projects would affect the desert's ability to store carbon, and, if so, to what degree; (2) how climate change could influence the proposed project, specifically within sensitive areas; and (3) how the projected impacts could be exacerbated by climate change. Comments also included concerns about energy development's effect on greenhouse gas emissions and geothermal energy projects' impacts to air quality.

Cultural Resources

Cultural resources comments were received during the scoping period. There were four comments from the Quechan Indian Tribe regarding cultural sites and evaluation of resources, and four comments from

the EPA regarding Tribal consultation and regulatory requirements for evaluation of cultural and historic resources. One comment was from a member of the public, who inquired about the resources that may be found in the WCM REEA.

Cumulative Impacts

Several cumulative impacts comments were received; they suggested that the EIS include (1) disclosure of any power sales agreements in the vicinity of an identified renewable energy development area; (2) assessment of the effect that all proposed projects in the area would have on "at-risk resources" and desert habitat in general; (3) consideration of the cumulative impacts associated with multiple large-scale solar projects proposed in the desert and the potential impacts on various resources, endangered species, and habitat; (4) identification of whether the proposed project is located within one of the solar energy study areas, as defined by the BLM and the Department of Energy (DOE); (5) description of the reasonably foreseeable future land use and associated impacts that will result from the additional power supply; (6) discussion of the anticipated climate change benefits from renewable energy; and (7) quantification of greenhouse gas emissions from different types of generating facilities including solar, geothermal, natural gas, coal-burning, and nuclear, as well as a comparison of these values.

Environmental Justice

Two comments were received regarding environmental justice. Those comments (1) recommended that the EIS include an evaluation of environmental justice populations within the geographic scope of the project, (2) suggested that assessment of the project's impact on minority and low-income populations should reflect coordination with those affected populations; and (3) asked that those populations be allowed a meaningful opportunity to participate in the decision-making process.

Energy and Minerals

One commenter inquired about the impacts to minerals within the project area.

Growth Inducement

One commenter indicated that the generation of additional electricity from renewable energy could indirectly result in population growth in the area.

Hazards and Public Health and Safety

Several comments were received during the scoping period regarding hazards and public health and safety. The Navy Special Warfare provided comments about compatibility of renewable energy projects with operations on and around the Chocolate Mountain Aerial Gunnery Range (CMAGR) including (1) potential displacement of protected natural resources onto military lands due to development of nearby public lands, (2) growth caused by public lands development leading to an increase in noise and traffic load onto nearby communities, (3) range transients crossing military property and related security and

safety concerns, (4) encroachment onto military lands by recreationalists due to adjacent public development, (5) fire safety issues, (6) ground and airborne radar interference from moving wind turbine blades causing flight safety concerns, (7) lighting impacts to pilots using night vision goggles, and (8) heights of renewable energy structures and the transmission lines that connect these sources to the grid posing potential aviation obstacles to Marine Corps low-level aircraft entering and exiting the range airspace and those transiting the area via military training routes and special use airspace. Several commenters recommended that the EIS identify/evaluate health and safety issues such as (1) measures to ensure that OHV and other users are not injured due to hazards associated with exposed collectors, piping, and transmission lines; (2) potential hazards and impacts to humans and wildlife, especially birds; (3) potential direct, indirect, and cumulative impacts of hazardous waste from construction and operation of the proposed project; (4) projected hazardous waste types and volumes, and expected storage, disposal, and management plans; (5) hazards from inactive Formerly Used Defense Sites (FUDS) located on the federal lands earmarked for geothermal, solar, or wind development, (6) fire and prevention of Homeland Security issues; (7) adequate law enforcement personnel; and (8) access to emergency services and hospitals. A comment also requested that agencies responsible for spill prevention, planning, and cleanup be identified.

Hydrology, Water Quality, and Water Resources

Comments regarding water resources included a request that the EIS (1) provide information on Clean Water Act Section 303(d) impaired waters in the WCM REEA, if any, and efforts to develop and revise Total Maximum Daily Loads; (2) quantify the expected surface water and groundwater required to construct, operate, and maintain the project; (3) analyze potential impacts to the aquatic resources, associated terrestrial resources, and wildlife species and plants (e.g., avoidance of microphyll woodland areas in Mammoth Wash); and (4) identify measures that would be taken during construction and operations and maintenance to avoid, minimize, and mitigate impacts to listed and at-risk species that are dependent on surface water and groundwater resources. Commenters also expressed concerns about the project's impact on available water supplies in the area, the quantity of water that would be required for various project uses, and the quantity of water used by the project compared with water needed for different solar technologies, i.e., whether water usage could be minimized by using alternative technologies.

Lands and Realty

Several comments were received regarding compatibility of renewable energy and surrounding land uses. The comments included recommendations that the EIS (1) discuss how renewable energy fits in with public use of land; (2) contain references and descriptions of land use plans and resource management plans associated with areas that have been identified as premium geothermal, solar, or wind resource areas; (3) discuss how the proposed action would support or conflict with the objectives of federal, state,

tribal, and local land use plans, policies, and controls in the selected areas; (4) describe the procedures necessary to amend or revise these plans as necessary to allow for solar, geothermal, or wind resource development; (5) provide direction on how to balance competing demands for uses; (6) discuss whether any of this land is classified as disturbed, and describe to what extent the land could be used for other purposes; (7) identify how this process relates to and is complementary to the Geothermal Preliminary EIS (PEIS), Wind PEIS, and Solar PEIS and associated SESAs, as well as to the Northern and Eastern Colorado Plan, the Imperial Sand Dunes Management Plan, and other planning efforts in the general area, including the Imperial Irrigation District Habitat Conservation Plan/Natural Community Conservation Plan HCP/NCCP: (8) identify how this process fits in with the Desert Renewable Energy Conservation Plan and transmission planning processes; (9) describe impacts from construction and/or expansion of transmission infrastructure in relation to renewable energy development; and (10) discuss casinos nearby on any tribal land and explain effects of transmission or extraction (geothermal). One comment recommended that the EIS evaluate the acquisition history of the Cattelus lands that were acquired for conservation purposes and suggested these lands should be protected from surface-disturbing activities. Another comment indicated that all the public lands north and east of the Coachella Canal are relatively undisturbed, and suggested that the Coachella Canal be used as the boundary of the evaluation area.

Noise

One comment suggested studies for noise in the immediate area and noise carried through mountainous areas and canyons.

Recreation

Several comments were received regarding recreation. Recommendations were that the EIS include a discussion or evaluation of (1) management of off-highway vehicle (OHV) recreation; (2) emissions from OHVs, as well as any mitigation measures to minimize these emissions; (3) disclosure of the impacts to recreational users on the lands identified for renewable energy development; (4) discussion of loss of access to public lands from proposed developments and impacts to recreation, hiking, camping, birding, hunting, rock-hounding, and so forth.

Socioeconomics and Economics

Comments regarding socioeconomics and economics included questions about (1) how renewable energy would increase the commerce or economic development in the region, (2) the costs and benefits, (3) costs to cover mitigation and/or operation, and maintenance, and (4) how the project would be funded.

Soils and Geology

Two comments were received regarding soils and geology. There was a recommendation that the EIS evaluate the potential for seismic risk and explain how this risk would be evaluated and monitored.

Another commenter suggested a complete analysis of impacts to the soil from each possible proposed energy development project.

Waste

Three comments were received regarding public health and safety. They suggested that the EIS address the full product life cycle of the project by sourcing photovoltaic (PV) equipment from a company that (1) minimizes environmental impacts during raw material extraction, (2) manufacturers future project components in a zero waste facility, and (3) provides future component disassembly for material recovery for reuse and recycling. Another commenter indicated that the EIS should describe the concentrated dewatered solid waste associated with the evaporation pond(s) and describe whether this waste product would be transported off site for disposal.

3.5 Decisions Based on the EIS

The EIS will provide sufficient analytical detail to allow BLM's authorized officer to decide:

- 1. Whether to approve or deny pending geothermal lease application CACA 047196,
- Which lands to make available for geothermal leasing,
- 3. Which lands to make available for solar energy ROWs, and
- 4. Which lands to make available for wind energy ROWs.

These decisions will also include any required activities that will be needed to mitigate and monitor impacts to sensitive resources that are identified in the analysis.

3.6 Issues Raised that Will Not Be Addressed in the EIS

Issues that were raised during scoping that will not be addressed in the EIS because they are beyond the scope of the analysis for the proposed action are:

- Address air quality impacts from predicted release of particulates from the shrinking shores of the Salton Sea, as well as transient air pollution from ORV activity, farm equipment, and travel on unpaved roads in the area;
- Conduct a comprehensive review of the habitat of the entire area and an analysis of the impacts
 of ground disturbance on the plant and mammal inhabitants of the area;
- Conduct a full inventory of all floral species encountered and of all rare species (plants or animals). Provide vegetation/wash habitat mapping at a scale that will provide an accurate accounting of wash areas and adjacent habitat types that will be directly or indirectly affected by the proposed activities.
- Identify wildlife movement corridors that are wide enough to minimize edge effects and allow natural processes of disturbance and subsequent recruitment to function.

Resource/Issue	Comment	Commenter		
PROJECT-RELATED ISSUES				
Project Alternatives				
Rationale for retention/elimination of alternatives	ALT-1: NEPA requires evaluation of reasonable alternatives, including those that may not be within the jurisdiction of the lead agency (40 CFR Section 1502.14(c)). A robust range of alternatives will include options for avoiding significant environmental impacts. The EIS should provide a clear discussion of the reasons for the elimination of alternatives, which are not evaluated in detail. Reasonable alternatives should include, but are not necessarily limited to, alternative sites, capacities, and technologies as well as alternatives that identify environmentally sensitive areas or areas with potential use conflicts. The alternatives analysis should describe the approach used to identify environmentally sensitive areas and describe the process that was used to designate them in terms of sensitivity (low, medium, and high). The alternatives analysis should identify and analyze an environmentally preferable alternative. The environmental impacts of the proposal and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of wetlands impacted, tons per year of emissions	EPA, 3/12/10		
Development of alternatives	produced, etc.). ALT-2: The EIS should describe how each alternative was developed, how it addresses each project objective, and how it will be implemented. The EIS should clearly describe the rationale used to determine whether impacts of an alternative are significant or not. Thresholds of significance should be determined by considering the context and intensity of an action and its effects (40 CFR 1508.27).	EPA, 3/12/10		
Technology advantages/disadvantages	ALT-3: The alternatives analysis should include a discussion of alternative sites, capacities, and generating technologies relevant to the development of geothermal, solar, and wind resources in the WCM REEA. The EIS should describe the benefits and disadvantages associated with each of the proposed technologies. EPA recommends that BLM establish a wide range of alternatives, including the consideration of an environmentally preferred alternative.	EPA, 3/12/10		

Resource/Issue	Comment	Commenter
Project Alternatives (Cont.)		•
General	ALT-4: The EIS must include a robust analysis of alternatives, including a private lands alternative and alternatives using other technologies including distributed generation. The stated objectives of the project must not unreasonably constrain the range of feasible alternatives evaluated in the EIS. The BLM must establish an independent set of objectives that do not unreasonably limit the EIS's analysis of feasible alternatives including alternative sites. At a minimum alternatives including the no-action alternative, an environmentally preferred alternative, and an alternative where power generation is sited adjacent to power consumption need to be included.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Project Description		
Identification of premium geothermal, solar, and wind resource development areas	PD-1: The EIS should identify the premium geothermal, solar, and wind resource areas in the WCM REEA. The EIS should describe and summarize the key studies and information used to identify these areas. The BLM should coordinate with local, state, and federal agencies to compile this information.	EPA, 3/12/10
RFD Scenario	PD-2: An RFD Scenario has been used as the basis for analyzing environmental impacts resulting from future leasing and development of federal geothermal resources within specific areas. The level and type of development anticipated in the RFD scenario is a best professional estimate of what may occur if these areas are leased and is usually not intended to be a "maximum development" scenario; however, it is frequently biased towards the higher end of expected development. At this stage, it is not known whether the EIS will utilize the RFD Scenario to describe the development potential within the identified areas. EPA is concerned that the RFD scenario, if utilized, could underestimate the geothermal generation capacity and development potential within specific areas; consequently, the environmental impacts associated with the future development of the geothermal resources may be minimized within the EIS or subsequent EIS/EA. If the RFD Scenario is used as a basis for analyzing environmental impacts, the	EPA, 3/12/10
	EIS should describe the actions that BLM will take should the RFD scenario underestimate the geothermal capacity within a specific area.	
RFD Scenario	PD-3: The EIS should describe the reasonably foreseeable future land use and associated impacts that will result from the additional power supply. The document should provide an estimate of the amount of growth, likely location, and the biological and environmental resources at risk.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Purpose and Need		
Number of renewable applications	PN-1: Why would BLM continue to approve renewable energy projects when more than enough applications have been received to meet the demand already.	Bridget R. Nash-Chrabascz, Quechan Indian Tribe, 3/19/10
Identify purpose and need	PN-2: The EIS should clearly identify the underlying purpose and need to which BLM is responding in proposing the alternatives (40 CFR 1502.13). The purpose of the proposed action is typically the specific objectives of the activity, while the need for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity.	EPA, 3/12/10
Provide a clear objective statement of the rationale for the proposed project	PN-3: The purpose and need should be a clear, objective statement of the rationale for the proposed project. The EIS should discuss the proposed project in the context of the larger energy market that this project(s) would serve; identify potential purchasers of the power produced; and discuss how the project will assist the state in meeting its RPS and goals.	EPA, 3/12/10
	RESOURCES	
Aesthetic/Visual		
General – renewable energy	AES-1: Industrial-scale energy projects always impact the wild character of an area. Unspoiled, uncluttered vistas are becoming scarcer in the California desert. Unspoiled view sheds are part of our national natural heritage and the impacts of loss of them in the California desert need to be considered. They are important to the health of the national psyche and tradition.	Terry Weiner, representing Desert Protective Council, 3/19/10
Air Quality		
Dust generation	AIR-1: You need to address air quality issues with any scraping of the earth here, dust being airborne.	Terry Weiner, representing Desert Protective Council. Scoping Meeting comment (meeting transcript), 3/4/10
Baseline or existing conditions	AIR-2: The EIS should provide a detailed discussion of ambient air conditions (baseline or existing conditions), NAAQS, criteria pollutant nonattainment areas, and potential air quality impacts of the proposed project (including cumulative and indirect impacts). Such an evaluation is necessary to assure compliance with state and federal air quality regulations, and to disclose the potential impacts from temporary or cumulative degradation of air quality.	EPA, 3/12/10
Air emissions	AIR-3: The EIS should describe and estimate air emissions from the proposed power plant, including potential construction and maintenance activities, as well as proposed mitigation measures to minimize those emissions.	EPA, 3/12/10

Resource/Issue	Comment	Commenter		
Air Quality (Cont.)				
Ambient air quality conditions and standards	AIR-4: The EIS should provide a detailed discussion of ambient air conditions, NAAQS, and criteria pollutant nonattainment areas in all areas considered for renewable energy development. The EIS should identify relevant local and state requirements and ensure all sources meet these requirements.	EPA, 3/12/10		
Quantify emissions	AIR-5: The EIS should estimate emissions of criteria pollutants from the proposed project and discuss the timeframe for release of these emissions over the lifespan of the project. The EIS should describe and estimate emissions from potential construction activities, as well as proposed mitigation measures to minimize these emissions.	EPA, 3/12/10		
Specify emission sources	AIR-6: The EIS should specify the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance. This source-specific information should be used to identify appropriate mitigation measures and areas in need of the greatest attention.	EPA, 3/12/10		
Equipment Emissions Mitigation Plan	 AIR-7: The EIS should identify the need for an EEMP. An EEMP will identify actions to reduce diesel particulate, carbon monoxide, hydrocarbons, and NO_x associated with construction activities. We recommend that the EEMP require that all construction-related engines: are tuned to the engine manufacturer's specification in accordance with an appropriate time frame; do not idle for more than five minutes (unless, in the case of certain drilling engines, it is necessary for the operating scope); include all available mitigation measures to reduce greenhouse gas emissions; are not tampered with in order to increase engine horsepower; include diesel particulate filters, oxidation catalysts and other suitable control devices on all construction equipment used at the project site; use diesel fuel having a sulfur content of 15 parts per million or less, or other alternative diesel fuel, unless such fuel cannot be reasonably procured in the market area; and include control devices to reduce air emissions. The determination of which equipment is suitable for control devices may include drilling equipment, generators, compressors, graders, bulldozers, and dump trucks. 	EPA, 3/12/10		

Resource/Issue	Comment	Commenter		
Air Quality (Cont.)				
Fugitive Dust Control Plan	 AIR-8: The EIS should identify the need for a Fugitive Dust Control Plan. We recommend that it include these general recommendations: Stabilize open storage piles by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions. Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; when hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 mph. Limit speed of earthmoving equipment to 10 mph. 	EPA, 3/12/10		
General conformity to an approved implementation plan	AIR-9: The EIS should address the applicability of CAA Section 176 and EPA's general conformity regulations at 40 CFR Parts 51 and 93. Federal agencies need to ensure that their actions, including construction emissions subject to state jurisdiction, conform to an approved implementation plan. Emissions authorized by a CAA permit issued by the state or the local air pollution control district would not be assessed under general conformity but through the permitting process.	EPA, 3/12/10		
NSR construction permit program	AIR-10: New major stationary sources of air pollution and major modifications to existing sources are required by the CAA to obtain an air pollution permit before commencing construction. This process is called new source review (NSR) and is required whether the major source or modification is planned for an area where the NAAQS are exceeded (non-attainment areas) or an area where air quality is acceptable (attainment and unclassifiable areas). Permits for sources in attainment areas are referred to as Prevention of Significant Deterioration (PSD) permits, while permits for sources located in non-attainment areas are referred to as non-attainment area (NAA) NSR permits. The entire program, including both PSD and NAA permitting, is referred to as the NSR program and is established in Parts C and D of Title I of the CAA. Based upon an area's attainment/non-attainment designations and a proposed project's anticipated criteria pollutant emission rates, a project may require both a PSD and an NAA permit.	EPA, 3/12/10		
NSR program permit process	AIR-11: The EIS should discuss if NSR program permits will be required for any geothermal, solar, or wind power plants that may be constructed. If so, the EIS should describe the permitting process and the information that must be addressed in the permits.	EPA, 3/12/10		

Resource/Issue	Comment	Commenter		
Air Quality (Cont.)				
Air quality impacts from development scenarios	AIR-12: Imperial County continues to be an impaired air basin. Air quality impacts from all possible development scenarios need to be addressed in the EIS and must be considered in conjunction with the predicted release of particulates from the shrinking shores of the Salton Sea and other existing sources of particulate and other transient air pollution sources such as ORV activity in the Algodones Dunes and from farm equipment and other vehicles on unpaved roads in the area.	Terry Weiner, representing Desert Protective Council, 3/19/10		
Air quality impacts of geothermal energy	AIR-13: What is the effect on greenhouse gas emissions? What effects on air quality are caused by geothermal energy?	Joyce Dillard, 3/12/10		
Biological				
New permit regulations for golden eagles	BIO-1: Well, I just wanted to make sure – I was at a meeting of the Fish and Wildlife Service over the past two days. It was a golden eagle colloquium meeting among basically all the different government agencies from Fish and Wildlife to BLM to California Fish and Game. And Fish and Wildlife is coming out with new rules and regulations regarding take on golden eagles. They have acknowledged that there is a national decline with the golden eagle population and in response to that, their new rules are saying there is going to be zero take on golden eagles. There is going to be a lot of changes in the permit process for take regarding energy projects from wind and solar, et cetera.	Chris Meador, representing Wildlife Research Institute. Scoping Meeting comment (meeting transcript), 3/4/10		
Golden Eagles	BIO-2: Although there are no specific projects for the Chocolate Mountain area at this time, I think studies for the golden eagle are going to be done by the current consultant, and if specific projects do come up, that it would be very important to include golden eagles in the environmental assessment since this is going to be a very important part of the new permit process, especially pertaining to take, which these energy projects most likely would produce.	Chris Meador, representing Wildlife Research Institute. Scoping Meeting comment (meeting transcript), 3/4/10		
Threatened and endangered species and critical habitat	BIO-3: The EIS should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. The document should identify and quantify which species or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Emphasis should be placed on the protection and recovery of species due to their status or potential status under the ESA.	EPA, 3/12/10		

Resource/Issue	Comment	Commenter
Biological (Cont.)		
Biological Opinion	BIO-4: We recommend that BLM consult with the USFWS and prepare a Biological Opinion under Section 7 of the ESA if there are threatened or endangered species present. The EIS should provide a recent status update of this report if this action has been or will be undertaken. Analysis of impacts and mitigation on covered species should include: Baseline conditions of habitats and populations of the covered species; A clear description of how avoidance, mitigation and conservation measures will protect and encourage the recovery of the covered species and their habitats in the project area; and Monitoring, reporting, and adaptive management efforts to ensure species and habitat conservation effectiveness.	EPA, 3/12/10
Construction/operation and maintenance impacts on T&E species and their habitat	BIO-5: The EIS should describe the extent of these activities and the associated impacts on habitat and threatened and endangered species. We encourage habitat conservation alternatives that avoid and protect high value habitat and create or preserve linkages between habitat areas to better conserve the covered species.	EPA, 3/12/10
Habitat protection and fragmentation	BIO-6: The EIS should indicate what measures will be taken to protect important wildlife habitat areas from potential adverse effects of proposed covered activities and to ensure that desert areas are minimally impacted. We encourage BLM to maximize options to protect habitat and minimize habitat loss and habitat fragmentation.	EPA, 3/12/10
Project fencing	BIO-7: The BLM should discuss the impacts associated with constructing fences around the project site(s), and consider whether there are options that could facilitate better protection of covered species.	EPA, 3/12/10
Shade impacts	BIO-8: The EIS should discuss the impacts associated with an increase of shade in the desert environment on vegetation and/or species.	EPA, 3/12/10
Impacts to avian species	BIO-9: The EIS should discuss the potential impacts on avian species due to collisions with wind turbines, power towers, and/or heliostats, and whether there is potential for the concentrating solar rays to burn avian species in flight.	EPA, 3/12/10
Compliance with Executive Order 13112	BIO-10: Executive Order 13112, Invasive Species (February 3, 1999), mandates that federal agencies take actions to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. Executive Order 13112 also calls for the restoration of native plants and tree species. If the proposed project will entail new landscaping, the EIS should describe how the project will meet the requirements of Executive Order 13112.	EPA, 3/12/10

Resource/Issue	Comment	Commenter		
Biological (Cont.)				
Invasive species Management	BIO-11: The EIS should include an invasive plant management plan to monitor and control noxious weeds.	EPA, 3/12/10		
Invasive exotic species	BIO-12: The EIS must identify and evaluate impacts to species and ecosystems from invasive exotics species. Many of these species invade disturbed areas, and then spread into wildlands. Fragmentation of intact, ecologically functioning communities further aids the spread and degradation of plant communities. These factors for wildland weeds are present in the study area, and their effect must be evaluated in the EIS. Additionally, landscaping with exotic species is often the vector for introducing invasive exotics into adjacent habitats and should be prohibited. Invasive landscape species displace native vegetation, degrade functioning ecosystems, provide little or no habitat for native animals, and increase fire danger and carrying capacity and should be banned from the project site.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10		
Sensitive/rare species habitat	BIO-13: The benefit of looking at an area like this proposal is the opportunity for the BLM to hone in on a proposal that avoids the rare resources and identify an area that lacks or has very few rare species conflicts, based on the results of comprehensive surveys.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10		
Comprehensive review of the habitat/corridors	BIO-14: There must be a comprehensive review of the habitat of the entire area and analysis of the impacts of ground disturbance on the plant and mammal inhabitants of the area. Please address the fact that animals need not only the habitat they occupy, but corridors or connections to other habitat.	Terry Weiner, representing Desert Protective Council, 3/19/10		
Surveys of sensitive species and vegetation communities	BIO-15: The Center requests that thorough, seasonal surveys be performed for sensitive plant species and vegetation communities, and animal species under the direction and supervision of the BLM and resource agencies such as the U.S. Fish and Wildlife Service and the CDFG. Full disclosure of survey methods and results to the public and other agencies without limitations imposed by the applicant must be implemented to assure full NEPA/ESA compliance. Surveys for the plants and plant communities should follow CNPS and CDFG floristic survey guidelines and should be documented as recommended by CNPS ² and	Ileene Anderson, representing Center for Biological Diversity, 3/12/10		
	California Botanical Society policy guidelines. A full floral inventory of all species encountered needs to be documented and included in the EIS. Surveys for animals should include an evaluation of the CWHR system's Habitat Classification Scheme. All rare species (plants or animals) need to be documented with a CNDDB form and submitted to the CDFG using the CNDDB form as per the state's instructions.			

Resource/Issue	Comment Comment	Commenter
Biological (Cont.)		<u>'</u>
Vegetation maps	BIO-16: The Center requests that the vegetation maps be at a large enough scale to be useful for evaluating the impacts. Vegetation/wash habitat mapping should be at such a scale as to provide an accurate accounting of wash areas and adjacent habitat types that will be directly or indirectly affected by the proposed activities. A half-acre minimum mapping unit size is recommended, such as has been used for other development projects. Habitat classification should follow CNPS's Manual of California Vegetation (Sawyer et al. 2009).	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Habitat impacts and mitigation	BIO-17: The EIS must evaluate all direct, indirect, and cumulative impacts to sensitive habitats, including impacts associated with the establishment of unpermitted recreational activities; the introduction of non-native plants, lighting, and noise; and the loss and disruption of essential habitat due to edge effects. A number of rare resources have potential to occur on this site including desert tortoise. All of these species have been identified as occurring in the general vicinity of the project site. Therefore, the EIS must adequately address the impacts and propose effective ways to avoid, minimize, and mitigate the impacts to these resources through alternatives including alternative siting and alternative onsite configurations.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Desert tortoise	BIO-18: The desert tortoise is continuing to decline throughout its range despite being under federal and state ESA protection as threatened. The proposal may have desert tortoise occurring on site. The BLM must first look at ways to avoid impacts to the desert tortoise, for example, by identifying and analyzing alternative configurations and sites outside of desert tortoise occupied habitat including areas that have already been severely disturbed by other prior land use as well as alternative proposal configurations that would avoid impacts.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Flat-tailed horned lizard	BIO-19: Recently, the FWS reinstated their November 29, 1993, proposed rule to list the flat-tailed horned lizard as threatened under the ESA of 1973, as amended. Public comment is now open on that proposed rule. This proposal may have flat-tailed horned lizard occurring on site. As with the desert tortoise, the BLM must look at ways to avoid impacts by configuring the proposal so as to avoid impacts to the lizard. The EIS should also address compliance with the flat-tailed horned lizard management strategy.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Flat-tailed horned lizard and desert tortoise	BIO-20: Impacts specifically to the habitat of the endangered desert tortoise and to the flat-tailed horned lizard, a special status species currently being considered for listing as threatened, must be considered. Cumulative impacts to the desert tortoise and the flat-tailed horned lizard from potential and actual habitat loss in other parts of their California desert range must be considered.	Terry Weiner, representing Desert Protective Council, 3/19/10

Resource/Issue	Comment	Commenter
Biological (Cont.)		
Burrowing owl	BIO-21: Imperial County is a stronghold for the burrowing owl in the state. If burrowing owls are identified on the site, the study area should be altered to avoid the burrowing owls.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Evaluate wildlife movement corridors, species and vegetation communities	BIO-22: A thorough and independent evaluation of the study area's impacts on wildlife movement is essential. The EIS must evaluate all direct, indirect, and cumulative impacts to wildlife movement corridors. The analysis should cover movement of large mammals, as well as other taxonomic groups, including small mammals, birds, reptiles, amphibians, invertebrates, and vegetation communities.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Habitat suitability	BIO-23: The EIS should first evaluate habitat suitability within the analysis window for multiple species, including all listed and sensitive species. The habitat suitability maps generated for each species should then be used to evaluate the size of suitable habitat patches in relation to the species' average territory size to determine the appropriate size and location of linkages and that they provide both live-in and move-through habitat. The analyses should also evaluate if suitable habitat patches are within the dispersal distance of each species. The EIS should address both individual and intergenerational movement (i.e., will the linkages support metapopulations of smaller, less agile species). The EIS should identify how to maintain connectivity by species. In addition, the EIS should consider how wildlife movement will be affected by other on-going, planned, and proposed development including ORV recreation in the region as part of the cumulative impacts.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Identify wildlife movement corridors	BIO-24: The EIS should identify wildlife movement corridors that are wide enough to minimize edge effects and allow natural processes of disturbance and subsequent recruitment to function. The EIS should also incorporate into the wildlife movement corridors key resources for species, such as host plants, pollinators, or other elements. For example, many species commonly found in washes depend on upland habitats during some portion of their cycle. Upland habitat protection is also necessary to prevent the degradation of aquatic habitat quality.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10

Resource/Issue	Comment	Commenter
Biological (Cont.)		
Areas to be excluded from evaluation	BIO-25: We recommend the evaluation area boundary exclude all of the high value habitats associated with the Salton Sea, Salton Sea shoreline, and any wetland or riparian habitats associated with natural drainages between Bombay Beach and the Imperial State Wildlife Area due to its importance for a number of listed and declining bird species as well as the endangered desert pupfish. For the portions of the latter that extend inland across the breadth of the evaluation area, we recommend that the riparian areas plus an effective buffer be excluded from development. These recommendations would include public land surface and split-estate lands. We note that within the evaluation area, BLM has already issued three geothermal leases covering approximately 3,000 acres that include portions of the high-value riparian habitats located in natural drainages inland from the Salton Sea, but which ultimately discharge into the sea east of Bombay Beach. We urge BLM to allow the public to participate in any future environmental reviews for geothermal development on these leases and to not simply rely on the BLM programmatic geothermal leasing environmental impact statement as sufficient to address resource impacts, alternatives, and mitigation measures at the site-specific level.	Jeff Aardahl, representing Defenders of Wildlife, 3/12/10
Wister Unit, Imperial Wildlife Area	BIO-26: Although it appears the evaluation area largely avoids this state wildlife area, there is a small split-estate parcel adjacent to the boundary at the northern end of the area, but located on the east side of the railroad. Recommendation: BLM should consult with the CDFG to identify any specific issues with regard to the management of the wildlife area and its wildlife resources.	Jeff Aardahl, representing Defenders of Wildlife, 3/12/10
Bat and bird species	BIO-27: Because the Salton Sea and the associated wildlife refuges and units attract and support millions of migratory and resident birds and bats, wind energy development within the region may not be compatible with bird and bat conservation due to potential strikes from wind turbine blades during periods when these animals are active, both day and night. Recommendation: BLM should carefully assess the evaluation area for the presence and abundance of bat and bird species throughout all seasons of the year and determine whether or not wind energy development is appropriate for this area.	Jeff Aardahl, representing Defenders of Wildlife, 3/12/10
Climate Change		
Climate change	CLIM-1: The EIS should consider how climate change could potentially influence the proposed project, specifically within sensitive areas, and assess how the projected impacts could be exacerbated by climate change.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Climate Change (Cont.)		'
Quantification of GHG emissions	CLIM-2: What is the effect on greenhouse gas emissions? What effects on air quality are caused by geothermal energy?	Joyce Dillard, 3/12/10
Carbon storage	CLIM-3: The EIS should discuss whether the trenching, grading, and filling associated with the construction of renewable energy projects will affect the desert's ability to store carbon, and to what degree this may occur.	EPA, 3/12/10
Climate change effects on desert ecosystems	CLIM-4: Climate change models must be taken into account. Dr. Cameron Barrows is in the process of important research on the effects of different climate change scenarios on the movement of desert flora and fauna. This and similar research and climate change models for the southwest desert in the upcoming 100 years need to be considered in all of our planning for the future health of the desert. Additionally, ground disturbance releases carbon into the atmosphere as well as reducing or eliminating the soil's ability to absorb carbon, thereby contributing in two ways to the atmospheric load of carbon.	Terry Weiner, representing Desert Protective Council, 3/19/10
Cultural Resources		
Cultural resource impacts	CULT-1: The area is rich in cultural resources.	Bridget R. Nash-Chrabascz, Quechan Indian Tribe, 3/19/10
	CULT-2: What archaeological or historic sites are in the project area?	Joyce Dillard, 3/12/10
Cultural sites	CULT-3: Known sites include temporary camps, villages, cremations, trails, pot drops, etc. Each site is integral to the next. If the area is opened for solar, wind, or geothermal development, the area must not be parceled.	Bridget R. Nash-Chrabascz, Quechan Indian Tribe, 3/19/10
Evaluation of resources	CULT-4: Each project area must be evaluated in context with the others.	Bridget R. Nash-Chrabascz, Quechan Indian Tribe, 3/19/10
Cultural resources surveys	CULT-5: The entire evaluation area must be surveyed for cultural resources at one time so that the Tribe can make an informed decision about the projects, once proposed.	Bridget R. Nash-Chrabascz, Quechan Indian Tribe, 3/19/10
Tribal consultation	CULT-6: The EIS should describe the process and outcome of government-to- government consultation between BLM and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Cultural Resources (Cont.)		
National Historic Preservation Act	CULT-7: Consultation for tribal cultural resources is required under Section 106 of the NHPA. Historic properties under the NHPA are properties that are included in the NRHP or that meet the criteria for the NRHP. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, consult with the appropriate SHPO/THPO. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed and mitigated. Section 106 of the NHP A requires that federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.	EPA, 3/12/10
Executive Order 13007	CULT-8: Executive Order 13007, Indian Sacred Sites (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the NRHP criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site.	EPA, 3/12/10
Cumulative Impacts		
Recommendation: power sales agreements	CU-1: Any signed power sales agreements that are associated with federal, state, or private lands that are located in the vicinity of an identified geothermal, solar, or wind development area should be disclosed in the EIS as part of the cumulative impacts analysis.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Cumulative Impacts (Cont.)		
Cumulative impacts for alternatives	CU-2: The cumulative impacts analysis should provide the context for understanding the magnitude of the impacts of the alternatives by analyzing the impacts of other past, present, and reasonably foreseeable projects or actions and then considering those cumulative impacts in their entirety (CEQ's Forty Questions, #18). The EIS should clearly identify the resources that may be cumulatively impacted, the time over which impacts are going to occur, and the geographic area that will be impacted by the proposed project. The EIS should focus on resources of concern—those resources that are "at risk" and/or are significantly impacted by the proposed project, before mitigation. In the introduction to the Cumulative Impacts Section, identify which resources are analyzed, which ones are not, and why. For each resource analyzed, the EIS should: Identify the current condition of the resource as a measure of past impacts. For example, the percentage of species habitat lost to date. Identify the trend in the condition of the resource as a measure of present impacts. For example, the health of the resource is improving, declining, or in stasis. Identify all on-going, planned, and reasonably foreseeable projects in the study area that may contribute to cumulative impacts. Identify the future condition of the resource based on an analysis of impacts from reasonably foreseeable projects or actions added to existing conditions and current trends. Assess the cumulative impacts contribution of the proposed alternatives to the long-term health of the resource, and provide a specific measure for the projected impact from the proposed alternatives. Disclose the parties that would be responsible for avoiding, minimizing, and mitigating those adverse impacts.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Cumulative Impacts (Cont.)		
Cumulative geothermal impacts	CU-3: The EIS should describe how BLM will quantify and evaluate environmental impacts if this¹ occurs. The potential environmental impacts associated with multiple geothermal development projects should be included as part of the Cumulative Impacts analysis. This is critical not only in terms of potential impacts on the environment, but also in terms of potential impacts on the viability of the geothermal resources.	EPA, 3/12/10
	EPA recommends that BLM examine the Cumulative Impact Guidance (http://www.dot.ca.gov/ser/cumulative_guidance/purpose.htm) prepared by CalTrans, the Federal Highway Administration (California Division), and EPA Region 9. Agencies can use the principles and 8-step process described in this document as a systematic way to analyze cumulative impacts for their projects.	
Multiple renewable energy applications	CU-4: The BLM has received more than 300 applications for solar and wind projects in the desert southwest. The BLM and DOE are preparing a Programmatic EIS to explain how they will address existing and future solar energy development applications on BLM-administered lands in six Western states. EPA is concerned about the cumulative impacts associated with the development of multiple large-scale solar projects in the desert region.	EPA, 3/12/10
Identify solar energy study areas	CU-5: The EIS should identify whether the proposed project is located within one of the solar energy study areas or in close proximity to one.	EPA, 3/12/10
	CU-6: The EIS should consider the cumulative impacts associated with multiple large- scale solar projects proposed in the desert southwest and the potential impacts on various resources including water supply, endangered species, and habitat.	EPA, 3/12/10
Impacts on desert ecosystem	CU-7: The Desert Protective Council is concerned about the integrity of the eastern Imperial County desert ecosystem as part of the health of the entire California Desert Ecosystem. Any disturbance of the land from solar, wind, or geothermal development in the West Chocolate Mountains. area described in Federal Register Notice Vol. 65. No. 26, February 10, 2010, must be looked at in the context of cumulative impacts from other industrial energy developments existing or planned in the California desert. The fabric of the fragile California desert is being strained and torn and risks shredding from the plethora of large projects being planned.	Terry Weiner, representing Desert Protective Council, 3/19/10

¹ If additional geothermal resources are available, beyond those analyzed in the EIS "Reasonable Development Scenario."

Resource/Issue	Comment	Commenter
Cumulative Impacts (Cont.)		•
Cumulative impacts of proposed development in CDCA Plan area	CU-8: Because of the number of projects that are already proposed in the CDCA, a thorough analysis of the cumulative impacts from all of these projects on the resources needs to be included.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Cumulative impacts	CU-9: Cumulative impacts to air quality should be analyzed given the potential air quality impacts from construction activities.	EPA, 3/12/10
Quantification of GHG emissions from different types of generating facilities	CU-10: The EIS should consider the cumulative impacts associated with multiple large-scale geothermal, solar, and wind projects proposed in the desert southwest and clarify how existing and/or proposed resources will be affected by climate change. The EIS should quantify and disclose the anticipated climate change benefits of geothermal, solar, and wind energy. We suggest quantifying GHG emissions from different types of generating facilities including solar, geothermal, natural gas, coalburning, and nuclear, and compiling and comparing these values.	EPA, 3/12/10
Energy/Minerals		
General	MIN-1: What effects are there to the minerals in the project area?	Joyce Dillard, 3/12/10
Environmental Justice		
Environmental Justice	EJ-1: Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994), directs federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. Guidance by CEQ clarifies the terms low-income and minority population (which includes American Indians) and describes the factors to consider when evaluating disproportionately high and adverse human health effects.	EPA, 3/12/10
Adverse impacts to minority and low-income populations	EJ-2: The EIS should include an evaluation of environmental justice populations within the geographic scope of the project. If such populations exist, the EIS should address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Assessment of the project's impact on minority and low-income populations should reflect coordination with those affected populations.	EPA, 3/12/10
Growth Inducement		
Population growth as a result of additional energy	GROWTH-1: As an indirect result of providing additional power, it can be anticipated that this project will allow for development and population growth to occur in those areas that receive the generated electricity.	EPA, 3/12/10

Resource/Issue	Comments Received (by topic) Comment	Commenter	
Hazards and Public Health and S	Hazards and Public Health and Safety		
Height of Structures – obstacle for aviation activities	HAZ-1: Heights of renewable energy structures and the transmission lines which connect these sources to the grid pose potential aviation obstacles to Marine Corps low-level aircraft entering and exiting the range airspace and those transiting the area via military training routes and special use airspace in and around the CMAGR. Specifically, if any structure is erected that has a vertical component in excess of 50 feet, its effect on training and safety will have to be determined. Additionally, if wires are strung between structures, at any elevation, safety of flight will have to be considered.	U.S. Marine Corps Installation West, 3/18/10	
Interference with ground activities at CMAGR	HAZ-2: Renewable energy farms may also impact military ground activity on and around the CMAGR. Siting and density must not limit and/or significantly alter ground accessibility to the range for military readiness training.	U.S. Marine Corps Installation West, 3/18/10	
Lighting impacts	HAZ-3: Certain types of ambient lighting can cause problems for our pilots when they are using night vision goggles while conducting flight operations and training at night and create safety of flight concerns. The ambient lighting issues will need to be assessed independently as well as cumulatively.	U.S. Marine Corps Installation West, 3/18/10	
Ground and airborne radar interference	HAZ-4: The potential for ground and airborne radar interference from moving wind turbine blades (radar scattering due to Doppler propagation of turning blades) can interfere with training and testing, and may also cause a safety of flight issue. Specifically, false Doppler returns could generate processing issues for systems utilizing Doppler logic and will need to be thoroughly reviewed for potential interference in training. Additionally, if any structure is erected that produces or replicates significant radar cross-section, it has the potential to cause undesirable effects to aircraft training on the range.	U.S. Marine Corps Installation West, 3/18/10	
Fire	HAZ-5: Furthermore, any interference with ground weapons locating radars may cause indirect fire safety issues.	U.S. Marine Corps Installation West, 3/18/10	
Radio-frequency (RF) Interference	HAZ-6: The RF spectrum will also require careful analysis. If any structure or device has potential to transmit RF energy, it could have an adverse effect on communications and radar reception/detection, and possibly illuminate RHAWs. Any interference with command and control of military operations on the range is unacceptable, as safety on the range will be compromised. RF interference with command and control of military operations will unnecessarily limit training and degrade military readiness.	U.S. Marine Corps Installation West, 3/18/10	

Resource/Issue	Comment	Commenter
Hazards and Public Health and S	Safety (Cont.)	
Security/encroachment onto restricted military lands	HAZ-7: Unintentional displacement of recreational users onto the CMAGR may occur as a result of construction of alternative energy development. By limiting or restricting access in and around alternative energy sites, recreational off-highway vehicle traffic along the CMAGR border may unintentionally produce encroachment into restricted areas and create safety issues.	U.S. Marine Corps Installation West, 3/18/10
Military Testing and Training for Operational Readiness	HAZ-8: Navy Special Warfare conducts readiness training on and around the Chocolate Mountain Aerial Gunnery Range. The training consists of (1) maneuver of forces, (2) live fire on established military-owned ranges, (3) land navigation, and (4) tactical ground mobility. The training is concentrated on the southwest portion of the Chocolate Mountain Range. Some long-range ground mobility training is conducted outside of the range on BLM-managed property. The portion of the training conducted on the CMAGR is addressed in the Yuma Training Range Complex Final EIS, 1996. Impacts to adjacent Navy Special Warfare readiness training activities need to be evaluated in the BLM's Draft EIS.	DoN, 3/12/10
Encroachment impacts to the military's aviation mission and flight safety	HAZ-9: The DoN views the development of lands and the construction of cellular and meteorological towers and windmills as important national priorities. The DoN encourages and supports development of these resources in conjunction with federal, state, and local agencies while simultaneously avoiding adverse encroachment impacts to the military's aviation mission and flight safety.	DoN 3/12/10
Compatibility with existing MTRs and SUAs/light encroachment	HAZ-10: There are several low-level MTRs and SUAs in the vicinity of the proposed project. These MTRs and SUAs have been developed in coordination with the FAA, the DoD, and the DoN. MTRs and SUAs provide: (1) aircrew training, (2) cruise missile test flights; and (3) research, development, testing, and evaluation of military weapons systems. Continued use is extremely critical to pilot and aircrew survivability training. Alternative energy development needs to be evaluated for compatibility with existing MTRs and SUAs. These MTRs and SUAs are also used for Night Vision Goggle training;	DoN 3/12/10

Resource/Issue	Comment	Commenter
Hazards and Public Health and	Safety (Cont.)	
Transmission and feeder lines also present a possible conflict with already existing uses	HAZ-11: Wind turbines, solar generating facilities, and transmission lines have potential impacts on the military mission. These tall structures can encroach on airspace, creating avoidance zones and preventing low-level aviation testing and training in these areas. Wind turbines also affect the operation of ground-based and airborne radar systems. In general, wind turbines raise the ambient electromagnetic noise level, which decreases the probability of radar detection. Additionally, supersonic aircraft can produce sonic booms that emit sound energy that is potentially damaging to solar equipment. Transmission and feeder lines also present a possible conflict with already existing uses. These impacts need to be evaluated in the BLM's Draft EIS.	DoN 3/12/10
CMAGR	HAZ-12: It is our understanding the United States Marine Corps, through the Regional Environmental Coordination Office, Marine Corps Installations West, will provide scoping comments under a separate cover. These comments will specifically address the CMAGR, a military range operated as part of the Yuma Training Range Complex.	DoN 3/12/10
Installation management issues	HAZ-13: Naval Air Facility El Centro is a military installation in the vicinity of the proposed project area. There are installation management issues to consider, including (1) potential displacement of protected natural resources onto military lands due to development of nearby public lands, (2) growth caused by public lands development leading to an increase in noise and traffic load onto nearby communities, (3) range transients crossing military property and related security and safety concerns, and (4) encroachment onto military lands by recreationalists due to adjacent public development. These impacts will need to be evaluated in the BLM's Draft EIS.	DoN 3/12/10
Impacts from evaporation and/or storm water ponds	HAZ-14: If the project includes evaporation and/or stormwater ponds, potential hazards and impacts to humans and wildlife, especially birds, should be discussed.	EPA, 3/12/10
Ponded water or bioremediation	HAZ-15: Explain whether any ponded water or bioremediation area associated with the project has the potential to attract wildlife, particularly migratory waterfowl. If there is potential for exposure of wildlife to contaminants in these waters, identify mitigation measures to avoid such impacts.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Hazards and Public Health and	Safety (Cont.)	
Hazardous materials/hazardous waste/solid waste	HAZ-16: The EIS should address potential direct, indirect, and cumulative impacts of hazardous waste from construction and operation of the proposed project. The document should identify projected hazardous waste types and volumes, and expected storage, disposal, and management plans. It should address the applicability of state and federal hazardous waste requirements. Appropriate mitigation should be evaluated, including measures to minimize the generation of hazardous waste (i.e., hazardous waste minimization). Alternate industrial processes using less toxic materials should be evaluated as mitigation. This potentially reduces the volume or toxicity of hazardous materials requiring management and disposal as hazardous waste. Environmental Justice Guidance under the National Environmental Policy Act, Appendix A (Guidance for Federal Agencies on Key Terms in Executive Order 12898), CEQ, December 10, 1997.	EPA, 3/12/10
Formerly used defense sites	HAZ-17: If there are any inactive FUDS located on the federal lands that have been earmarked for geothermal, solar, or wind development, these sites should be identified. Inactive FUDS could present a public danger from unexploded ordnance and this could affect parties involved with construction or recreation. The EIS should identify which agency is responsible for ensuring that these hazards have been evaluated and eliminated and describe what measures BLM will implement to ensure that FUDS no longer represent a public danger to anyone accessing these lands.	EPA, 3/12/10
Spill prevention, planning, and cleanup	HAZ-18: EPA recommends that the EIS address the issue of spill prevention, planning, and cleanup. This topic could be incorporated in ROW authorization stipulations that would apply to all lands subject to development. This stipulation would name the grantee as the responsible party for any discharge of hazardous substances that may occur during operations and would commit the grantee to specified spill prevention techniques to be outlined by the BLM.	EPA, 3/12/10
General safety measures for OHV and other users	HAZ-19: The EIS should clarify what general measures will be incorporated to ensure that OHV and other users are not injured due to hazards associated with exposed collectors, piping, and transmission lines. It would be reasonable to assume that OHV users do not always stay on designated trails or may not know which trails are in fact designated. Some precautions regarding safety should be implemented.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Hazards and Public Health and S	Safety (Cont.)	
Potential for fire	HAZ-20: Because any industrial project increases the potential for human-caused fire to occur on site, an analysis of fire and prevention including best management practices must be addressed and clearly identified in the EIS—not only onsite protection of resources, but also preventing fire from moving into the adjacent lands. Fire is incredibly detrimental to desert ecosystems, resulting in degradation of the habitat, and if an area is frequently re-burned, it results in a type conversion to nonnative vegetation.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Fire risks	HAZ-21: What fire risk exists? Are there sufficient fire personnel and equipment?	Joyce Dillard, 3/12/10
Contamination	HAZ-22: What contamination exists within the former gunnery range? Has the U.S. Army Corps of Engineers cleared the property for use? Is there lead contamination? Will land use changes increase that contamination?	Joyce Dillard, 3/12/10
Homeland security/law enforcement	HAZ-23: What risks does this project present in homeland security issues? Are there enough police and other law enforcement personnel to cover those risks? What is the jurisdiction for enforcement?	Joyce Dillard, 3/12/10
Emergency services	HAZ-24: How will this project affect health and safety issues in the region including access to services and especially emergency services and hospitals?	Joyce Dillard, 3/12/10
Hydrology, Water Quality, and W	ater Resources	
Water supply and water source	HYDRO-1: The EIS should estimate the quantity of water the project(s) will require and describe the source of this water and potential effects on other water users and natural resources in the project's area of influence. The EIS should clearly describe existing groundwater conditions, potential cumulative impacts to groundwater quantity and quality, and avoidance measures to prevent impacts.	EPA, 3/12/10
Impacts to surface and groundwater	HYDRO-2: The EIS should clearly depict reasonably foreseeable direct, indirect, and cumulative impacts to groundwater and surface water resources, including depletion of these resources. For groundwater, the potentially affected groundwater basin should be identified and any potential for subsidence and impacts to springs or other open water bodies and biologic resources should be analyzed.	EPA, 3/12/10

Resource/Issue	Comments Received (by topic) Comment	Commenter
Hydrology, Water Quality, and	Water Resources (Cont.)	
Water needs, source, and availability	 HYDRO-3: The EIS should include: A discussion of the amount of water needed for the development of geothermal, solar, and wind resources; where this water will be obtained; and the amount and source of power that would be needed to move the water to and through the facility; A discussion of availability of groundwater within the basin and annual recharge rates; A description of the water-rights permitting process and the status of water rights within that basin, including an analysis of whether water rights have been over-allocated; A description of any water right permits that contain special conditions; measures to mitigate direct, indirect, and cumulative impacts; and provisions for monitoring and adaptive management; A detailed discussion of cumulative impacts to groundwater supply within the hydrographic basin(s) that would support the alternatives, including impacts from other geothermal or large-scale solar installations that have also been proposed; An analysis of different types of technology that can be used to minimize water use for the geothermal or solar power plant; A discussion of whether it would be feasible to use other sources of water, including wastewater or deep-aquifer water, as cooling water for the proposed geothermal or solar thermal power plant; A discussion of whether it is possible to recycle the water that would be sent to the evaporation pond (if wet cooling is utilized) and re-inject or reuse this water; and An analysis of the potential for alternatives to cause adverse aquatic impacts such as impacts to water quality and aquatic habitats. 	EPA, 3/12/10
Solar technologies and water usage	HYDRO-4: Large-scale solar installations that utilize wet-cooling may require significant water resources. Solar installations that utilize dry-cooling require much less water—up to 90 percent less. We recognize that wet cooling technology has performance advantages over dry cooling, especially in arid regions, and may be less expensive; however, due to the general scarcity of water in the region, the large number of solar project applications submitted to BLM, and the ever-increasing demand for this commodity, EPA is concerned about the depletion of this resource, particularly in desert regions.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Hydrology, Water Quality, and V	Vater Resources (Cont.)	
Water demands	HYDRO-5: EPA recommends that the EIS discuss the water demands of various solar technologies, including wet cooling and dry cooling systems. We also recommend that BLM consider utilization of technologies that will minimize water use and the implementation of conservation measures that will reduce water demands.	EPA, 3/12/10
Water conservation measures	HYDRO-6: EPA encourages BLM to include in the EIS a description of all water conservation measures that will be implemented to reduce water demands. Project designs should maximize conservation measures such as appropriate use of recycled water for landscaping and industry, xeric landscaping, and water conservation education. Water-saving strategies can be found in the EPA's publications Protecting Water Resources with Smart Growth at www.epa.gov/piedpage/pdf/waterresources with sg.pdf, and USEPA Water Conservation Guidelines at www.epa.gov/watersense/docs/app a508.pdf.	EPA, 3/12/10
Impacts of climate change to water supply	HYDRO-7: The EIS should describe water reliability for the proposed project and clarify how existing and/or proposed sources will be affected by climate change. At a minimum, EPA expects a qualitative discussion of impacts of climate change to water supply, and the adaptability of the project to these changes.	EPA, 3/12/10
Disposal of discharges	HYDRO-8: The EIS should address the potential effects of project discharges, if any, on surface and groundwater quality. Discharges may include, but are not limited to, thermal changes, suspended solids, toxicity, metals, oil and grease, chlorine, salinity, and pH. At the project level, the specific discharges should be identified and potential effects of discharges on designated beneficial uses of affected waters should be analyzed.	EPA, 3/12/10
Water discharge regulations	HYDRO-9: The EIS should note that a NPDES permit would be required for discharges to WOUSs. The disposal of wastewater or other fluids into the subsurface is subject to the requirements of the Underground Injection Control Program, pursuant to the Safe Drinking Water Act. Permits may or may not be required, depending on project specifications and federal and/or state requirements. In addition, BLM and state well construction requirements are required to ensure that groundwater is protected.	EPA, 3/12/10

Resource/Issue	Comment	Commenter	
Hydrology, Water Quality, and W	Hydrology, Water Quality, and Water Resources (Cont.)		
Impacts to WOUSs and of the state	HYDRO-10: The proposal may include tributaries to Mammoth Wash, and certainly some microphyll woodland areas that are supported by infrequent water flows. The EIS document must avoid and minimize impacts to the jurisdictional WOUSs and the Water of the State of California, and identify a comprehensive mitigation strategy if impacts are to occur. An evaluation of the effect of additional groundwater pumping (in conjunction with other groundwater issues [pumping, nitrate plume, etc.] in the basin on the water quality in the basin and surface water resources, and its effect on the native plant and animal species and their habitats, need to be included in the EIS.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10	
Ensure future project compliance with water quality standards	HYDRO-11: The subsequent EISs/EAs should address how the proposed project would be designed and operated to ensure that the facility meets federal and state water quality standards that provide for the protection and maintenance of beneficial uses downstream from the facility.	[EPA, 3/12/10	
Process water generation and disposition	HYDRO-12: If the facility is a zero discharge facility, the EIS should disclose the amount of process water that would be disposed of on site and explain methods of onsite containment. If evaporation ponds will be used for disposal of geothermal effluents, condensate, or other process water, identify chemical characteristics of the pond water and how seepage into groundwater will be prevented. Identify the storm design containment capacity of ponds, explain how overflow in larger storm events will be managed, and discuss potential environmental impacts (drainage channels affected, water quality, biological resources) in the event of overflow.	EPA, 3/12/10	
Water use for geothermal energy	HYDRO-13: Geothermal energy affects land use and subsidence. Brine water is usually used. Will the use of water cause any conservation problems or increased water costs to the service areas?	Joyce Dillard, 3/12/10	

Resource/Issue	Comment Comment	Commenter
Hydrology, Water Quality, and W	ater Resources (Cont.)	
CWA Section 404	HYDRO-14: The project applicant should coordinate with the U.S. Army Corps of Engineers to determine if the proposed project requires a Section 404 permit under the CWA. Section 404 regulates the discharge of dredged or fill material into WOUSs, including wetlands and other special aquatic sites. The EIS should describe all WOUSs that could be affected by the project alternatives, and include maps that clearly identify all waters within the project area. The discussion should include acreages and channel lengths, habitat types, values, and functions of these waters. In addition, EPA suggests that BLM include a jurisdictional delineation for all WOUS, including ephemeral drainages, in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the December 2006 Arid West Region Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. A jurisdictional delineation will confirm the presence of WOUSs in the project area and help determine impact avoidance or if state and federal permits would be required for activities that affect WOUSs.	EPA, 3/12/10
Permit compliance for discharge into WOUSs	HYDRO-15: If a permit is required, EPA will review the project for compliance with Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA. Pursuant to 40 CFR 230, any permitted discharge into WOUSs must be the least environmentally damaging practicable alternative available to achieve the project purpose. The EIS should include an evaluation of the project alternatives in this context in order	EPA, 3/12/10
Alternatives to avoid discharges into WOUSs; minimizing and mitigating impacts	to demonstrate the project's compliance with the 404(b)(1) Guidelines. HYDRO-16: If a discharge to a WOUS is anticipated, the EIS should discuss alternatives to avoid the discharge and how potential impacts would be minimized and mitigated. This discussion should include (a) acreage and habitat type of the WOUS that would be created or restored; (b) water sources to maintain the mitigation area; (c) revegetation plans, including the numbers and age of each species to be planted, as well as special techniques that may be necessary for planting; (d) maintenance and monitoring plans, including performance standards to determine mitigation success; (e) the size and location of mitigation zones; (f) the parties that would be ultimately responsible for the plan's success; and (g) contingency plans that would be enacted if the original plan fails. Mitigation should be implemented in advance of the impacts to avoid habitat losses due to the lag time between the occurrence of the impact and successful mitigation.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Hydrology, Water Quality, and W	ater Resources (Cont.)	
Drainage patterns/floodplains	HYDRO-17: The EIS should describe the original (natural) drainage patterns in the project locale, as well as the drainage patterns of the area during project operations, and identify whether any components of the proposed project are within a 50- or 100-year floodplain.	EPA, 3/12/10
Functions and locations of WOUSs, as well as ephemeral washes	HYDRO-18: We recommend the EIS include information on the functions and locations of WOUSs, as well as ephemeral washes in the project area, because of the important hydrologic and biogeochemical role these washes play in direct relationship to higher-order waters downstream.	EPA, 3/12/10
Impaired water bodies	HYDRO-19: The EIS should provide information on CWA Section 303(d) impaired waters in the project area, if any, and efforts to develop and revise TMDLs.	EPA, 3/12/10
Restoration and enhancement efforts for those waters	HYDRO-20: The EIS should describe existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters.	EPA, 3/12/10
CWA general	HYDRO-21: What effects are there related to the CWA?	Joyce Dillard, 3/12/10
Water importation	HYDRO-22: Will water importation be required and from what source? How does this affect the state drought? Scientific studies and measurements should be included.	Joyce Dillard, 3/12/10
Lands and Realty		
Lands open for public use	LU-1: How does this fit in with public use of these lands? You listed all geothermal, all this, combinations thereof. Will it still be open for multiple uses/public use?	Ms. Barrett, Scoping Meeting comment (meeting transcript), 3/4/10
Land use compatibility with military land and airspace	LU-2: Navy Region Southwest is the shore installation management headquarters for the DoN's Southwest Region, which includes California. The military supports and encourages cost-effective development of renewable energy, in a manner designed to avoid adverse impacts to the mission and safety on or near military lands and under designated airspace. We have developed scoping comments that emphasize sustained access to air and land, ensuring the continuing ability to accomplish the military mission. Our scoping comments will focus on the compatibility of the proposal with military land and airspace use adjacent to or in the vicinity of the area proposed to be studied. These land and airspace uses include (1) military testing and training for operational readiness and (2) other military land and air uses.	DoN, 3/12/10
Describe land use and resource management plans	LU-3: The EIS should contain references and descriptions of land use plans and resource management plans associated with areas that have been identified as premium geothermal, solar, or wind resource areas.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
Lands and Realty (Cont.)		
Address proposed land use and resource management plans	LU-4: The EIS should discuss how the proposed action would support or conflict with the objectives of federal, state, tribal, or local land use plans, policies and controls in the selected areas. The term "land use plans" includes all types of formally adopted documents for land use planning, conservation, zoning, and related regulatory requirements. Proposed plans not yet developed should also be addressed if they have been formally proposed by the appropriate government body in written form (CEQ's Forty Questions, #23b).	EPA, 3/12/10
Describe procedures to amend or revise land use/management plans	LU-5: The EIS should describe the procedures necessary to amend or revise these plans as necessary to allow for solar, geothermal, or wind resource development.	EPA, 3/12/10
Potential land use conflicts	LU-6: The EIS should outline special procedures used to evaluate potential conflicts of use in areas that are located in close proximity to national parks or national monuments, or in areas with high recreational use. The EIS should provide direction on how to balance competing demands for uses.	EPA, 3/12/10
Land classification and uses	LU-7: The EIS should describe the current condition of the WCM REEA, discuss whether any of this land is classified as disturbed, and describe to what extent the land could be used for other purposes.	EPA, 3/12/10
Consistency with adopted land use plans/"piecemeal planning"	LU-8: While we are encouraged to see that BLM is considering areas that may have fewer environmental impacts than currently proposed project sites, we are concerned that this study area, which should have been included in the Solar PEIS process, is now signaling that additional study areas could proliferate across the western landscape. Study area designation should not be piecemealed but instead should be included in the existing process or at a minimum be developed in a focused and comprehensive manner.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10
Relationship to other planning efforts.	LU-9: The DEIS should clearly identify how this process relates to and is complementary to the Geothermal PEIS, Wind PEIS, and Solar PEIS, and associated SESAs, the Northern and Eastern Colorado Plan, the Imperial Sand Dunes Management Plan, and other planning efforts in the general area, including the Imperial Irrigation District HCP/NCCP. Lastly, the EIS should also identify how this process fits in with the Desert Renewable Energy Conservation Plan and transmission planning processes.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10

Resource/Issue	Comment	Commenter
Lands and Realty (Cont.)		
Use of public lands for renewable energy generation	LU-10: The environmental review should include studies on the implementation of the alternative energy resources. Land use becomes an issue for: Transmission lines Wildlife including fishes, aviary, and endangered species Plants including endangered species Water	Joyce Dillard, 3/12/10
	LU-11: Impacts from construction and/or expansion of transmission infrastructure in relation to renewable energy development must be considered. Transmission infrastructure is part of the footprint from all energy projects.	Terry Weiner, representing Desert Protective Council, 3/19/10
Transmission-related impacts	LU-12: Transmission lines change the uses and wildlife, birds, and plants are disrupted. Disrupted scenic views or property damage in this area changes the economic impacts of any tourism.	Joyce Dillard, 3/12/10
	LU-13: Is the area tribal land?	Joyce Dillard, 3/12/10
Native American lands	LU-14: Are there casinos nearby on any tribal land and what effects will transmission or extraction (geothermal) [have on them]?	
Lands acquired for conservation purposes	LU-15: Within the southern third of the evaluation area there are approximately four or five square miles (sections) of acquired land. We assume these acquisitions were for conservation purposes and that the funding sources for the acquisition included the Land and Water Conservation Fund. According to our information, it is BLM policy to not allow surface-disturbing activities on lands acquired for conservation purposes. Recommendation: The acquisition history of these lands should be evaluated and if	Jeff Aardahl, representing Defenders of Wildlife, 3/12/10
	BLM documents show they were acquired for conservation purposes, then we recommend BLM remove them from the evaluation area.	
Public lands contiguous to the CMAGR	LU-16: There are six to seven sections of public land in the southern third of the evaluation area that abut the CMAGR and the acquired lands These are intact blocks of public lands that appear to be largely free of impacting multiple uses at this time. Recommendation: These lands should be protected from surface-disturbing activities. We note in general that all the public lands located north and east of the Coachella Canal are relatively undisturbed, and we recommend that the Coachella Canal be used as the boundary of the evaluation area.	Jeff Aardahl, representing Defenders of Wildlife, 3/12/10
Noise		
Noise studies	NOISE-1: Studies need to be done on noise in the immediate area and noise carried through mountainous areas and through canyons.	Joyce Dillard, 3/12/10

Resource/Issue	Comment	Commenter
ecreation		
Impacts on OHVs and recreational use	REC-1: The development of solar resources could restrict or reduce the opportunities for recreational use, including OHVs that may access areas that may have been designated as open for recreational use. Alternatives requesting compensation for impacted recreation lands may or may not be considered because of feasibility and cost. In many cases, OHV use is generally not confined to trails, but tends to be unrestricted.	EPA, 3/12/10
OHV management	REC-2: EPA recommends that the EIS describe BLM's overall guidance for addressing OHV management in the areas identified for renewable energy development and specifically how that guidance will be modified, should geothermal, solar, or wind projects be approved.	EPA, 3/12/10
Conflicts in areas with high recreational use	REC-3: The EIS should outline procedures used to evaluate conflicts of use in areas with high recreational use. The EIS should provide direction on how to balance competing uses.	EPA, 3/12/10
Current and projected recreational use within the lands	REC-4: EPA recommends that BLM fully evaluate current and projected recreational use within the lands identified for geothermal, solar, or wind development.	EPA, 3/12/10
An accurate and complete route inventory	REC-5: An accurate and complete route inventory will be necessary to complete this evaluation.	EPA, 3/12/10
Describe and estimate emissions from OHVs	REC-6: Emissions from OHV use can be considered as cumulative impacts on air quality; consequently, the subsequent EIS/EA should describe and estimate emissions from OHVs, as well as any mitigation measures to minimize these emissions.	EPA, 3/12/10
Impacts to recreational users and costs/compensatory measures	REC-7: EPA recommends that there be full disclosure of the impacts to recreational users in the lands identified for renewable energy development. Construction, operations, and maintenance will likely impact recreational users. We recommend that BLM provide information about costs associated with compensatory measures.	EPA, 3/12/10
Loss of access to public lands	REC-8: Loss of access to our public lands from these proposed developments must be considered, including impacts to recreation, hiking, camping, birding, hunting, rock-hounding, etc. These impacts must be addressed in the context of the predicted continuing increase of population in California and particularly in Riverside and San Bernardino and Imperial counties.	Terry Weiner, representing Desert Protective Council, 3/19/10

Resource/Issue	Comment	Commenter
Social and Economic Consider	ations	<u>'</u>
Economic development	ECON-1: How do these renewable energies increase the commerce or economic development of the region? Are other regions favored in more commerce and economic development or will it stay local? What is the cost-benefit of having these renewable energies in the region?	Joyce Dillard, 3/12/10
	ECON-2: What costs to cover mitigation and/or operation and maintenance will be funded by this county and what by other benefitting counties?	Joyce Dillard, 3/12/10
Soils/Geology		
Seismic Risk	GEO-1: The EIS should discuss the potential for seismic risk and discuss how this risk will be evaluated, monitored, and managed	EPA, 3/12/10
Impacts to soils	GEO-2: Please include a complete analysis of impacts to the soil from each possible proposed energy development project.	Terry Weiner, representing Desert Protective Council, 3/19/10
Transportation		
	TR-1: If traffic is increased, what congestion plans are in place?	Joyce Dillard, 3/12/10
Traffic impacts	TR-2: Impacts to local roads and traffic during development of projects must be considered.	Terry Weiner, representing Desert Protective Council, 3/19/10
Waste		
Life cycle analysis/recycling	WASTE-1: EPA recommends that the proponent strive to address the full product life cycle by sourcing power tower components from a company that (1) minimizes environmental impacts during raw material extraction, (2) manufactures components in a zero waste facility, and (3) provides future component disassembly for material recovery for reuse and recycling.	EPA, 3/12/10
Evaporation ponds	WASTE-2: If the proposed project utilizes evaporation ponds, the EIS should describe the concentrated, dewatered solid waste associated with the evaporation pond(s) and describe whether this waste product will be transported off site for disposal.	EPA, 3/12/10
Product life cycle/reuse or recycling	WASTE-3: Production can and should address the full product life cycle, from raw material sourcing through end of life collection and reuse or recycling. Companies can minimize their environmental impacts during raw material extraction and facilitate future material recovery for reuse or recycling. Solar, wind, and geothermal companies can facilitate collection and recycling through buy-back programs or collection and recycling guarantees.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
	MISCELLANEOUS	
General		
Support for renewable energy	GEN-1: Marine Corps Installations West is comprised of seven Marine Corps bases and stations in Southwestern United States. We provide the installation and training infrastructure to enable Marine Corps air and ground forces to develop and sustain operational readiness. Although we are committed to maximizing the use of renewable energy, our primary mission is to support training, sustaining, and deploying the warfighter. To prevent inadvertent impacts while simultaneously supporting alternative energy issues, we must work efficiently and effectively in partnership and coordination with your agency and others in our national pursuit of alternative energy. While recognizing the importance of the study, we have concerns about the impact on our mission posed by potential geothermal, solar, and wind energy projects in the WCMRE area.	U.S. Marine Corps Installation West, 3/18/10
	GEN-2: General support for renewable energy development within the West Chocolate area, with specific interest in geothermal energy development on acquired lands.	Jamie Hall, Wildlands Conservancy
Cooperating agency	GEN-3: The Marine Corps has accepted your invitation to be a cooperating agency and appreciates the opportunity to provide scoping comments under NEPA on the BLM proposal to study the potential for renewable energy development in WCMRE area.	U.S. Marine Corps Installation West, 3/18/10
Project scope	GEN-4: The Energy Production and Utility Corridors section of the California Desert Conservation Area Plan (1980) as amended requires at minimum that the following resource issues be addressed: 1. Consistency with the Desert Plan, including designated and proposed planning corridors; 2. Protection of air quality; 3. Impact on adjacent wilderness and sensitive resources; 4. Visual quality; 5. Cooling-water source(s); 6. Waste disposal; 7. Seismic hazards; and 8. Regional equity.	Ileene Anderson, representing Center for Biological Diversity, 3/12/10

Resource/Issue	Comment	Commenter
General (Cont.)		
Resources to be evaluated	GEN-5: When identifying premium geothermal, solar, and wind resource areas, the EIS should also identify environmentally sensitive areas as well as areas with potential use conflict including: 1. Areas that contain species that are threatened or endangered; 2. Migratory bird flyways; 3. Aquatic resources, including wetlands and other WOUSs; 4. Bodies of water listed on the CWA 303(d) list; 5. Ambient air conditions and criteria pollutant nonattainment areas; 6. Sole source aquifers; 7. Areas that are affiliated with Native American tribes; 8. Historic properties, Native American sacred sites or sensitive areas, and cultural resources; 9. Paleontological resources; 10. Large residential areas in close proximity; 11. Environmental justice communities; 12. Military bases or areas with air and ground traffic; and 13. Recreational use areas.	EPA, 3/12/10
Landscape-level analysis	GEN-6: The EIS should utilize existing sources of information to develop a general, landscape-level analysis that identifies environmentally sensitive areas and areas with potential use conflicts. The BLM should develop an analysis approach that identifies low, medium, and high sensitivity areas for these resource areas and describe this process in detail in the EIS. The BLM should coordinate with local, state, and federal agencies to compile this information.	EPA, 3/12/10
Transmissions lines needs analysis	GEN-7: When identifying premium geothermal, solar, and wind resource areas, the EIS should also identify: (1) areas with established transmissions lines, (2) areas where there is a lack of available transmission capacity, (3) areas where new transmission lines have been proposed in conjunction with other projects, and (4) areas that should be designated as transmission corridors in scenic areas.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
General (Cont.)		
Infrastructure-related impacts	GEN-8: The EIS should address at a general, landscape level the potential impacts due to the associated infrastructure required for the development of renewable energy projects. Activities that may cause direct and indirect impacts include installing and maintaining solar collector arrays, wind turbines, or geothermal wells; building access roads; constructing transmission lines; and pumping groundwater. The indirect and cumulative effects of these infrastructure changes should be identified. The EIS is the appropriate stage to identify landscape-level mitigation measures to minimize unacceptable impacts to sensitive resources in the surrounding landscape.	EPA, 3/12/10
General mitigation	GEN-9: The EIS should address how impacts will be assessed and mitigated at the project-level.	EPA, 3/12/10
"Tiering" for subsequent site- specific NEPA analysis	GEN-10: The EIS should describe (1) how and if the EIS will serve as a "tiering" document for subsequent site-specific NEPA analysis prepared for specific project applications, (2) the factors used to determine when a subsequent EIS is required, and (3) the factors used to determine when an EA is required. The environmental review process should be explained in detail. This will ensure that the appropriate environmental review, permitting, or compliance measures will be identified, defined, and implemented during each phase of the project.	EPA, 3/12/10
Federal laws/permits	GEN-11: The EIS should describe the permitting requirements from a national perspective in terms of compliance with federal regulations such as the CAA, CWA, ESA, Migratory Bird Treaty Act, NHPA, and NEPA. The process should be clearly defined and include all permits and approvals that may be required, their sequence, and the interrelationships between them.	EPA, 3/12/10
State requirements/plans	GEN-12: The EIS should provide comprehensive information on state regulatory requirements and permits necessary to develop geothermal, solar, and wind resources within California including (1) a comprehensive summary of applicable regulations, including local laws; (2) a list of permits that may be required; and (3) flow-charts illustrating the steps required to obtain the necessary permits to comply with environmental regulations within each of the states.	EPA, 3/12/10

Resource/Issue	Comment	Commenter
General (Cont.)		
Provide additional resource protection	GEN-13: Standard ROW authorizations should contain appropriate stipulations relating to all aspects of project development, including, but not limited to, road construction and maintenance; vegetation removal; natural, cultural, and biological resources mitigation and monitoring; and site reclamation. Standard ROW stipulations may not provide adequate resource protection, especially in areas where little resource data currently exist. In the instance that important resources are discovered, EPA recommends that BLM retain the flexibility to require appropriate mitigation measures to adequately protect resources.	EPA, 3/12/10
ROW authorizations	GEN-14: EPA recommends the EIS provide detailed information on ROW authorizations and that ROW grants acknowledge that any proposed activity is subject to NEPA.	EPA, 3/12/10
Siting of renewable energy projects on disturbed, degraded, and contaminated sites	GEN-15: EPA encourages BLM and other interested parties to pursue the siting of renewable energy projects on disturbed, degraded, and contaminated sites, before considering large tracts of undisturbed public lands.	EPA, 3/12/10
Effects of Transmission needs	GEN-16: The EIS should consider the direct and indirect effects of the inter-connecting transmission line for the proposed project, as well as the cumulative effects associated with the transmission needs of other reasonably foreseeable projects.	EPA, 3/12/10
Adaptive management	 GEN-17: Adaptive management is an iterative process that requires selecting and implementing management actions, monitoring, comparing results with management and project objectives, and using feedback to make future management decisions. The process recognizes the importance of continually improving management techniques through flexibility and adaptation instead of adhering rigidly to a standard set of management actions. Although adaptive management is not a new concept, it may be relatively new in its application to specific projects. The effectiveness of adaptive management monitoring depends on a variety of factors, including: The ability to establish clear monitoring objectives; Agreement on the impact thresholds being monitored; The existence of a baseline or the ability to develop a baseline for the resources being monitored; The ability to see the effects within an appropriate timeframe after the action is taken; The technical capabilities of the procedures and equipment used to identify and measure changes in the affected resources and the ability to analyze the changes; The resources needed to perform the monitoring and respond to the results. 	EPA, 3/12/10

Resource/Issue	Comment	Commenter
General (Cont.)		
Adaptive management (Cont.)	GEN-18: EPA recommends that BLM consider adopting a formal adaptive management plan to evaluate and monitor impacted resources and ensure the successful implementation of mitigation measures. EPA recommends that BLM review the specific discussion on adaptive management in the NEPA Task Force Report to the CEQ on modernizing NEPA.	EPA, 3/12/10
	GEN-19: Transmission also includes loss of energy in wind and solar. How is that loss distributed in the area and with what effect?	Joyce Dillard, 3/12/10
	GEN-20: How much continuous land is needed for solar farms and wind farms?	Joyce Dillard, 3/12/10
	GEN-21: What infrastructure needs to be built to sustain the new land use?	Joyce Dillard, 3/12/10
Miscellaneous	GEN-22: Defenders is a national conservation organization dedicated to protecting all wild animals and plants in their natural communities. To this end, we employ science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction. Defenders believes that renewable energy projects can be accommodated in the California desert, but only if they are carefully designed and located in areas that avoid sacrificing what remains of our relatively intact desert landscape and its associated biological resources and values.	Jeff Aardahl, representing Defenders of Wildlife, 3/12/10

Key:

BLM = Bureau of Land Management

CAA = Clean Air Act

CalTrans = California Department of Transportation

CDFG = California Department of Fish and Game

CEQ = Council on Environmental Quality

CFR = Code of Federal Regulations

CMAGR = Chocolate Mountains Aerial Gunnery Range

CNDDB = California Natural Diversity Data Base

CNPS = California Native Plant Society

CWA = Clean Water Act

CWHR = California Wildlife Habitat Relationship

DoN = Department of the Navy

DoD = Department of Defense

DOE = Department of Energy

EA = Environmental Assessment

EEMP = Equipment Emissions Mitigation Plan

EIS = Environmental Impact Statement

EPA = Environmental Protection Agency

ESA = Endangered Species Act

FAA = Federal Aviation Administration

FUDS = Formerly Used Defense Sites

HCP = Habitat Conservation Plan

mph = miles per hour

MTRs = military training routes

NAA = non-attainment area

NAAQS = National Ambient Air Quality Standards

NCCP= Natural Community Conservation Plan NEPA = National Environmental Policy Act

NHPA = National Historic Preservation Act

NO_x = nitrogen oxides

NPDES = National Pollutant Discharge Elimination System

NRHP = National Register of Historic Places

NSR = New Source Review

OHV = off-highway vehicle

ORV = off-road vehicle

PSD = Prevention of Significant Deterioration

RF = radio-frequency

RFD = Reasonably Foreseeable Development

RHAWs = Radar Homing and Warning Receivers

ROW = right-of-way

SHPO = State Historic Preservation Officer

SUAs = special use airspaces
T&E = threatened and engangered

THPO = Tribal Historic Preservation Officer
TMDLs = Total Maximum Daily Loads

WCM REEA = West Chocolate Mountains Renewable

Energy Area

WOUSs = Waters of the United States

4.0 SUMMARY OF FUTURE STEPS IN THE PLANNING PROCESS

The EIS process requires a team of interdisciplinary resource specialists to complete each step. An important part of the BLM planning process is engaging the public and relevant agencies from the earliest stages of the planning process and throughout planning to address issues, comments, and concerns. The steps of the planning process and agency authority and decisions to be made are described below. Figure 2 provides a summary of the EIS process and schedule.



Figure 2 Planning Process Flow Chart and Timeline

The WCM REEA is presently managed under the CDCA Plan (BLM 1980; as amended). Information and decisions from the CDCA Plan will be reviewed and incorporated in the pending new amendment to the CDCA plan to the extent possible.

Identification of Issues

Issues associated with the project were identified through the scoping period, which initiated the planning process. The scoping process and the issues identified through the scoping process are documented in this scoping report.

Collection of Data and Information

Much of the necessary resource data and information will be compiled from existing data on file at the BLM El Centro Field Office or available through other local agencies and academic institutions and other sources to update and/or supplement BLM's information.

Preparation of Draft EIS/Draft Plan Amendment

Based on collected data, including public comments, a description of the project alternatives (including a "No Action" alternative and a "Preferred" alternative) will be developed. Only alternatives that meet a standard of technical and economic feasibility will be considered in detail. The alternatives will be responsive to issues identified through the scoping process, fulfill the purpose and need (as described in the EIS), be consistent with agency planning documents, and address key social and environmental concerns. Impacts that could result from implementing the project and alternatives will be analyzed, and measures to mitigate those impacts will be identified where appropriate.

This EIS will include the following:

- Summary
- Purpose of and need for the project
- Description of alternatives (including the project, or "preferred alternative")
- Affected environment
- Environmental consequences
- Mitigation measures to minimize impacts
- Other NEPA requirements

Public Comment Period

Publication of the Draft EIS/Draft CDCA Plan Amendment is anticipated in the third quarter of 2011. After the documents are published, a Notice of Availability will be published in the Federal Register and a 90-day public comment period will follow, although BLM welcomes input at any time during the planning process. Copies of the Draft EIS/Draft CDCA Plan Amendment will be distributed to elected officials, regulatory agencies, and interested members of the public. The document will also be available online at the EI Centro Field Office website at http://www.blm.gov/ca/st/en/fo/elcentro.html.

During the public comment period, public hearings will be held to obtain public comments on the document. All activities the public is invited to attend will be announced at least 15 days prior to the event in local news media. BLM will receive comments at the meetings and will also receive written comments outside of the meeting times.

Response to Comments and Preparation of Final EIS/Proposed CDCA Plan Amendment and Record of Decision

After the public comment period, the BLM will respond to comments and prepare a Final EIS/Proposed CDCA Plan Amendment. The availability of the Final EIS/Proposed CDCA Plan Amendment will be announced in the Federal Register, and a 30-day public protest period will follow. Copies of the Final EIS/Proposed CDCA Plan Amendment will be distributed to elected officials, regulatory agencies, and

interested members of the public. The document will also be available online at the El Centro Field Office website, http://www.blm.gov/ca/st/en/fo/elcentro.html.

Following the protest period and concurrent 30-day governor's review, the BLM will resolve valid protests and prepare a Record of Decision, which is anticipated to be released in the second quarter of 2011. A Notice of Availability (NOA) for the Record of Decision will be announced in the Federal Register.

5.0 REFERENCES

United States Department of the Interior Bureau of Land Management (BLM). 1980. *The California Desert Conservation Area Plan.* Bureau of Land Management Desert District, Riverside, CA.

United States Department of the Interior. 2009. Secretary of the Interior's Secretarial Order No. 3285: Renewable Energy Development by the Department of the Interior. Signed March 11, 2009.